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CASE INSTITUTE OF TECHNOLOGY
Statistical Laboratory
Cleveland 6, Ohio

Mathematical Sciences Directorate
Air Force Office of Scientific Research
Washington 25, D. C.

PERCENTILE POINTS OF ORDER STATISTICS IN
SAMPLES FROM BETA, NORMAL, CHI (1 D.F.) POPULATIONS

by

Zakkula Govindarajulu and Nicholas W. Hubacker

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If $p(\alpha, i, N)$ denotes the α^{th} probability point of i^{th} smallest order statistic in random samples of size N drawn from the Beta distribution, $p(\alpha, i, N)$ is computed accurate to eight decimal places for $N = 1(1)30(5)60$, $i = 1(1) 1+[N/2]$ and $\alpha = 0.01, 0.025, 0.10, 0.25, 0.50, 0.75, 0.90, 0.975, 0.99$. Also, the 25th, 50th and 75th percentile points of the Beta distribution for $N = 65(5)100$, $i = 1(1) 1+[N/2]$ are computed with the same accuracy. Using the above values the percentile points of the normal, chi (1 d.f.) and Weibull order statistics in samples of sizes up to and including 30 are computed accurate to 4 or 5 decimal places. Applications of these tables are indicated.

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Zakkula Govindarajulu

and

Nicholas W. Hubacker

Case Institute of Technology

O. ABSTRACT

If $p(\alpha, i, N)$ denotes the α^{th} probability point of i^{th} smallest order statistic in random samples of size N drawn from the Beta distribution, $p(\alpha, i, N)$ is computed accurate to eight decimal places for $N = 1(1)30(5)60$, $i = 1(1) 1+[N/2]$ and $\alpha = 0.01, 0.025, 0.10, 0.25, 0.50, 0.75, 0.90, 0.975, 0.99$. Also, the 25th, 50th and 75th percentile points of the Beta distribution for $N = 65(5)100$, $i = 1(1) 1+[N/2]$ are computed with the same accuracy. Using the above values the percentile points of the normal, chi (1 d.f.) and Weibull order statistics in samples of sizes up to and including 30 are computed accurate to 4 or 5 decimal places. Applications of these tables are indicated.

1. INTRODUCTION

Pearson [9] has provided extensive tables of the incomplete Beta distribution. It was realized that certain percentage points of the incomplete

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Beta distribution were more useful than the complete distribution of the incomplete Beta. Thompson [10] tabulated the percentage points of the incomplete Beta distribution accurate to five significant figures for $v_1 = 1(1)10, 12, 15, 20, 24, 30, 40, 60, 120$; $v_2 = 1(1)30, 40, 60, 120, \infty$; $\alpha = 0.005, 0.01, 0.025, 0.05, 0.10, 0.25, 0.50$ where v_1 and v_2 denote the parameters of the Beta distribution and α denotes the percentage. Comrie and Hartley [12] gave methods of interpolation in the tables of Thompson [10]. Cochran [1] gave an approximate formula for the percentage points of the incomplete Beta distribution, for large values of its parameters. Eisenhart et al [3] tabulated accurate to five significant figures, the percentile points of the median in samples from the uniform distribution of sizes $N = 3(2)15(10)95$ and for $\alpha = 0.001, 0.005, 0.01, 0.025, 0.05, 0.10, 0.20, 0.25$. Applying inverse interpolation in Pearson's [9] tables, Gupta [5] tabulated the percentile points of the order statistics in samples drawn from the gamma population with even degrees of freedom. Leone et al [8] tabulated the percentile points of the binomial distribution for sample sizes $N = 10(5)100$ and $\alpha = 0.0025, 0.005, 0.01, 0.025, 0.05, 0.1, 0.9, 0.95, 0.975, 0.99, 0.995, 0.9975$. Using Thompson's [10] and other values, Eisenhart [4] tabulated accurate to five significant figures the probability points of order statistics in random samples of size N from a uniform distribution, for $N = 1(1)10$ and for $\alpha = 0.001, 0.005, 0.01, 0.025, 0.05, 0.10, 0.20, 0.25, 0.50$.

Some rank order test statistics for instance, Terry's c_1 -test statistic and Fraser's [5] test for symmetry, are linear sums of expected values of order statistics in samples from standard normal and standard positive normal populations respectively. In the place of the expected values of order statistics, one could use the percentile points of the order statistics. Hence, it is of interest to prepare tables of the percentage points of order statistics in samples from a uniform distribution. The percentage points of order statistics

in samples drawn from any continuous population can be obtained by taking the inverse of the percentage points of the uniform order statistics, with respect to the cumulative distribution function of the underlying continuous population.

2. NOTATION

Let $X_{1,N} \leq X_{2,N} \leq \dots \leq X_{N,N}$ be the order statistics in random samples of size N drawn from a continuous population having $F(x)$ for its cumulative distribution function (c.d.f.). Let $p(\alpha, i, N)$ denote the α th percentage point of $X_{i,N}$. Then $p(\alpha, i, N)$ is given by the relation

$$P(i, i-1) = \sum_{j=0}^{i-1} \binom{i-1}{j} F^{i-j}(\alpha, i, N) [1-F(p(i, \alpha, N))]^{N-i} dF(x) = \alpha. \quad (2.1)$$

That is

$$P(i, i-1) = \sum_{j=0}^{i-1} \binom{i-1}{j} F^{i-j}(\alpha, i, N) [1-F(p(i, \alpha, N))]^{N-i} = \alpha. \quad (2.2)$$

Thus, one can find $p(\alpha, i, N)$ by solving Equation (2.2) for $F(p(\alpha, i, N))$ and then taking its inverse with respect to F . A similar approach was made by Leone et al [8] for computing the percentiles of the binomial distribution. Unless otherwise stated, p denotes $p(\alpha, i, N)$. Throughout Φ denotes the standard normal c.d.f. given by

$$\Phi(x) = (2\pi)^{-1/2} \int_{-\infty}^x e^{-t^2/2} dt. \quad (2.3)$$

3. METHODS OF COMPUTATION

The percentage points of the uniform order statistics were computed by Newton-Raphson iteration using the following polynomial representation for the relation when N and i are integral:

$$\sum_{j=i}^N \binom{N}{j} \alpha^j (1-\alpha)^{N-j} = \alpha.$$

The derivative of the left hand side expression of the above equation is evaluated from its integral representation given in (2.1). Double precision arithmetic was used when necessary to obtain eight decimal accuracy, that is, iteration was continued until the absolute difference between two iterations was less than 10^{-9} . Since the percentage points of the uniform order statistics are roots of certain polynomials which constitute upper tails of the binomial distribution, our values given in Table 1 are related to the percentile points of the binomial distribution given by Leone et al [8]. The values of Leone et al [8] agree with our value to at least seven decimal places. In Table 1, the percentage points of the uniform order statistics are presented for $N = 1(1)30(5)60$, $i = 1(1) 1+[N/2]$ and $\alpha = 0.01, 0.025, 0.10, 0.25, 0.50, 0.75, 0.90, 0.975, 0.99$. The values for $i > 1+[N/2]$ are obtained by using the relation

$$B_{1-p}(N+1-i, i) = 1 - B_p(i, N-i+1). \quad (3.1)$$

The percentage points of order statistics in random samples from any continuous population can be obtained by taking the inverse of the percentage points of the uniform order statistics with respect to the c.d.f. of the population. Thus, the percentage points of the normal order statistics are given by

$$x(p, i, N) = \Phi^{-1}(p(\alpha, i, N)) \quad (3.2)$$

Also, the c.d.f. of the positive normal (chi 1 d.f.) distribution is related to the normal c.d.f. by

$$\begin{aligned} \chi(x) &= 2\Phi(x) - 1, & x > 0. \\ &= 0 & \text{otherwise.} \end{aligned} \quad (3.3)$$

The percentage points of the chi-order statistics are given by

$$x(p,i,N) = \Phi^{-1}((1+p)/2). \quad (3.4)$$

Hasting's [7] approximation to Φ was used. This approximation is given by

$$\Phi(x) = 1 - e^{-x^2/2} \sum_{k=1}^5 \eta_k \eta^k, \quad x \geq 0$$

$$\begin{aligned} \text{wt. } \eta_0 & \quad \eta = (1 + 2^{-1/2} x b)^{-1} \\ b & = 0.32759110 \\ a_1 & = 0.12741479 \\ a_2 & = -0.14224838 \\ a_3 & = 0.71070690 \\ a_4 & = -0.72657604 \\ a_5 & = 0.53070273, \end{aligned}$$

when $x < 0$, the approximation is obtained by considering $1 - \Phi(-x)$. After using this approximation for Φ , Newton-Raphson iteration was used to solve for $x(p,i,N)$. The percentage points of normal order statistics accurate to four decimal places are given in Table 2 for $N = 1(1)30$, $i = 1(1) 1+[N/2]$. The other values can be obtained by symmetry. The percentage points of the chi-order statistics accurate to four decimal places are presented in Table 3 for $N = 1(1)30$, $i = 1(1)N$. The percentage points of the Weibull order statistics are given by

$$x(p,i,N) = (-\ln p)^{1/c} \quad (3.5)$$

where c denotes the shape parameter of the Weibull distribution, the c.d.f. of which is given by $1 - \exp(-x^c)$. The percentage points of the Weibull order statistics accurate to five decimal places are presented in Table 4 for

$N = 1(1)30$, $i = 1(1)N$, $c = 2.0, 2.5$ and 5.0 .

Certain minor errors have been uncovered in the tables of Thompson [10]. These are presented in Table 3.1.

Table 3.1

α	i	N	Ours	Thompson's
0.01	13	27	0.25722525	0.25722
0.01	1	30	0.00033495	0.00033496
0.025	4	15	0.07787154	0.077871
0.05	4	23	0.06167552	0.061675

All the computations were done on Burroughs 220. The computations of the tables presented here too about thirty hours of machine time.

4. APPLICATIONS

4.1 The percentile points of the uniform order statistics can be used to find the percentile points of the Fisher's F distribution. If $F_{\alpha, 2m, 2n}$ denotes the α^{th} percentage points on the F distribution with $2m, 2n$ degrees of freedom, then

$$F_{\alpha, 2m, 2n} = n p(\alpha, m, m+n-1) / m [1 - p(\alpha, m, m+n-1)] \quad (4.1)$$

where $p(\alpha, m, m+n-1)$ is the α^{th} percentage point of the m^{th} smallest order statistic in random samples of size $m+n-1$ drawn from the uniform population on (0,1). Obviously, Table 1 is useful in life-testing problems as indicated by Leone et al [8] and in approximating the percentage points of the hypergeometric distribution as suggested by Thompson [10].

An application of the percentile points of the chi-order statistics is as follows: consider a random variable X having the density function given by

$$f(x, \theta) = (2/\pi)^{1/2} e^{-\frac{1}{2}(x-\theta)^2}, \quad x > \theta$$

$$= 0 \quad \text{otherwise.}$$

Let $X_{1,N} \leq X_{2,N} \leq \dots \leq X_{N,N}$ be the order statistics in a random sample of size N drawn from this population. We wish to test the hypothesis: $\theta=0$ against the hypothesis: $\theta > 0$. $X_{1,N}$ can be a reasonable test statistic. The percentile points of the smallest chi-order statistic can be used to obtain the critical values of $X_{1,N}$.

Similarly, let $X_{1,N} \leq X_{2,N} \leq \dots \leq X_{N,N}$ be the order statistics in a random sample of size N drawn from a Weibull population having the following density function.

$$f(x, \theta) = c(x-\theta)^{c-1} e^{-(x-\theta)^c}, \quad x > \theta$$

$$= 0 \quad \text{otherwise,}$$

where c is assumed to be known exactly. Then, a reasonable test statistic for testing the hypothesis: $\theta=0$ against the hypothesis: $\theta > 0$, could be $X_{1,N}$. In order to carry out the test procedure, the percentile points of the smallest Weibull order statistic are required.

5. CONCLUSION

Our tables are more extensive and more accurate than tables available at present. No attempts were made to propose interpolation and extrapolation methods. The harmonic interpolation method proposed by Comrie and Hartley [2] is also applicable here but it involves use of special tables. Linear interpolation for a fixed percentage seems to give 3 to 4 decimal accuracy for $N \geq 15$.

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	0.0	0.25	0.50	0.75	1.00	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00
1	0.0501256	0.1257912	0.25532057	0.5131161	1.13397459	2.29233921	5.00900000	6.8377221	7.77633320	8.4188603	8.77633320	8.84188603	8.90000000				
2	0.08463451	0.08463476	0.16195243	0.34511062	0.69161971	1.206229945	2.370039351	5.3584112	8.3159685	7.0759823	7.8455653	7.8455653					
3	0.0890314	0.04290933	0.1351637	0.1958011	0.3265183	0.50010000	0.67964820	0.90419989	0.9666964	0.95700068	0.94109628	0.94109628					
4	0.02550943	0.06309946	0.11274145	0.25899625	0.60399514	1.15919356	2.29289322	4.3765862	5.2712932	6.0272647	6.8477223	6.8477223					
5	0.04190864	0.06758598	0.09761146	0.142955037	0.26302207	0.48572755	0.8467820	0.57959942	0.75130537	0.80587971	0.85012940	0.85012940					
6	0.0200805	0.0506076	0.1029622	0.20851564	0.55931249	1.2904939	2.4214165	5.9042266	6.5071973	6.2182375	6.0189088	6.0189088					
7	0.05663985	0.05274495	0.1726445	0.1727495	0.1932613	0.1381015	0.45418061	0.58389076	0.5576040	0.71641717	0.77792777	0.77792777					
8	0.05663985	0.16663280	0.18024538	0.24663445	0.35983631	0.60930000	0.64056377	0.7533631	0.81074662	0.85367720	0.89476216	0.89476216					
9	0.01673765	0.0421074	0.09951244	0.1742688	0.66531571	1.09101126	2.06299047	0.31870793	0.30303777	0.45925813	0.53584112	0.53584112					
10	0.2676319	0.64327187	0.62809088	0.9259526	1.6114232	2.6644906	3.8047969	5.10731634	0.58180343	0.64127198	0.70588633	0.70588633					
11	0.08472995	0.1181725	0.1521611	0.2000887	0.29631655	0.4210716	0.55319826	0.66309561	0.72861613	0.77232400	0.82639305	0.82639305					
12	0.01342473	0.03630330	0.07300863	0.1493873	0.40026438	0.90427833	1.7866444	0.28031433	0.36816366	0.40961576	0.48205253	0.48205253					
13	0.22266507	0.6669256	0.6539345	0.7982324	1.1307403	0.2784806	0.72071923	0.45276494	0.52070297	0.57872370	0.64336456	0.64336456					
14	0.70803383	0.9989827	1.2875647	1.6595862	2.5107400	3.66411611	0.68009699	0.50617973	0.65373856	0.70957914	0.76367595	0.76367595					
15	0.42277038	1.8401357	2.2563216	0.7986026	0.37884844	0.50000000	0.6211516	0.72139705	0.77467842	0.81506488	0.85772062	0.85772062					
16	0.01275558	0.03031502	0.06309115	0.1308827	0.35522136	0.82099554	1.50103938	0.25010574	0.31233098	0.36941665	0.43755867	0.43755867					
17	0.01955787	0.03818004	0.06382706	0.12622874	0.20131116	0.30269933	0.40624549	0.47067933	0.52509957	0.58994200	0.64336456	0.64336456					
18	0.60953959	0.8529341	1.1111271	1.4685423	2.20537714	3.32051997	0.53821543	0.59968934	0.55085575	0.50857914	0.46767848	0.46767848					
19	0.12996017	1.1570.277	1.0290295	0.23066183	0.42008344	0.44015522	0.55438632	0.65537681	0.71075918	0.75513721	0.80179598	0.80179598			</		

(16/03/2020)

PERCENTILE POINTS OF THE BETA DISTRIBUTION

N	1	.01	.025	.05	.10	.25	.50	.75	.90	.95	.975	.99
12	3	.07898714	.05485064	.07187025	.09565591	.14585204	.21668637	.30117800	.38552117	.43810544	.49413775	.53734291
	4	.07589465	.09924608	.12285065	.15418765	.21613303	.29757561	.38877792	.47526650	.52732640	.57185824	.62219301
	5	.12146660	.15165223	.18102475	.21868114	.26984706	.33852863	.42309370	.51900341	.59913770	.65112449	.69759574
	6	.17460978	.21094464	.24529981	.28817244	.33631865	.39507119	.45665831	.51772404	.58476221	.65133077	.76510743
13	1	.00077280	.00194563	.00393786	.00807189	.02188633	.05192249	.10114895	.16232207	.20581667	.24705234	.29829617
	2	.01192391	.01920667	.02805337	.04169104	.07409501	.12579068	.19405394	.26783571	.31633976	.35029744	.41282653
	3	.03577522	.05038107	.06606756	.08799643	.13447707	.20044860	.27978683	.35977620	.41009860	.45447106	.50617072
	4	.06945535	.09092038	.11266577	.14161108	.19912725	.27527577	.36148477	.44426332	.49464973	.53813154	.58775888
	5	.11083485	.13857934	.16565943	.20050204	.26676124	.35016336	.44028476	.52342878	.57261934	.61426260	.66089956
	6	.15881843	.19223244	.22395541	.26373025	.33681125	.42507666	.51670410	.59823836	.64520072	.68422240	.72711260
	7	.21287733	.25134550	.28704302	.33065920	.40901671	.50000000	.59988334	.66914082	.71295100	.74865452	.78717267
14	1	.00071762	.00180678	.00365710	.00749750	.02033903	.04830485	.09427634	.15165710	.19263618	.23163576	.28031433
	2	.01095157	.01779452	.02599933	.03865823	.06178994	.11702214	.18107342	.25067480	.29673424	.33868434	.38905548
	3	.03305638	.04570928	.06110293	.08147715	.12475050	.18647410	.26171924	.33721368	.38534968	.42812816	.47826424
	4	.06402787	.08368932	.10404731	.13093941	.18458705	.26698421	.33774460	.41697713	.46565661	.50797588	.55666853
	5	.1019861	.12759843	.15271762	.18513416	.24709954	.32575116	.41167691	.49196521	.54000545	.59103533	.62743469
	6	.14568246	.17461108	.20607334	.24315700	.31174146	.39544318	.48351315	.56310769	.60958513	.64861989	.69203023
	7	.19471782	.23026054	.26358493	.30455391	.37824537	.46514666	.55350540	.63086833	.67497152	.71139060	.75120041
15	1	.00066980	.00168643	.00341371	.00699947	.01899605	.04515840	.08827751	.14233410	.18103627	.21801936	.26435775
	2	.01019918	.01657591	.02422573	.03603698	.06119409	.10939610	.16965060	.23555885	.27939619	.31948457	.36789056
	3	.03072318	.04311199	.05684686	.07585876	.11633765	.17432059	.24495394	.31723711	.36344177	.40460270	.45316633
	4	.05939019	.07871154	.09665833	.12176872	.17032246	.23939339	.31691098	.39273347	.43978444	.4809113	.52851443
	5	.09433642	.11824111	.14164394	.17196803	.23011496	.30651982	.38652218	.46-97098	.51075189	.55100324	.59689282
	6	.13457643	.15336432	.19086470	.22559130	.29016962	.36967045	.45426429	.5317759	.57744366	.61619627	.65971022
	7	.17946410	.21266673	.24327242	.28218421	.35182731	.43483279	.52038216	.59646683	.64003479	.67713023	.71771053
	8	.22877590	.25586135	.29998646	.34152084	.41498947	.50000000	.59501053	.65847916	.70001353	.73413865	.77127412
16	1	.00062795	.00158111	.00320069	.00656339	.01781944	.04239672	.08299596	.13403568	.17074972	.20590721	.25010579
	2	.00954358	.01551361	.02267877	.03374882	.05017407	.10270302	.15961071	.22217203	.26395740	.30232074	.34883832
	3	.02869776	.04047373	.05314597	.07096636	.10898634	.16365421	.23058919	.29956404	.34382520	.38347624	.43049327
	4	.05538108	.07266204	.09025243	.11380218	.16107953	.22476459	.29848659	.37122224	.41657228	.4564-55	.50293639
	5	.08783773	.11016095	.13211095	.16055945	.21338294	.28588592	.34242000	.41692195	.48439642	.52777142	.56897086
	6	.12575897	.15198367	.17776584	.21041255	.27140648	.34705038	.42830827	.50530994	.548834708	.58662064	.62994547
	7	.16645967	.19753414	.22660156	.26291544	.32888953	.40822650	.49093377	.56544045	.50898842	.64565391	.68659093
	8	.21171644	.24651012	.27860267	.31782734	.39769226	.46960827	.55222478	.62495833	.66662583	.70122139	.73930772
17	1	.00059102	.00148817	.00301271	.00617851	.01678008	.03995331	.07831036	.12667384	.16156528	.19506277	.23730141
	2	.00897121	.01457932	.02131763	.03173399	.05662805	.09678160	.15069104	.21021099	.25012445	.28688940	.33163330
	3	.02652722	.03798506	.04989081	.06666754	.10525134	.15421749	.21781141	.28370181	.32619306	.36440916	.40992343
	4	.05188048	.06410774	.08464508	.10681665	.15144033	.21178500	.28207432	.35186879	.395664143	.43431787	.47962104
	5	.08216584	.10313552	.12377092	.15057692	.20240303	.26940046	.34436893	.41638919	.46054867	.49899327	.54338762
	6	.11680917	.14209747	.16630267	.19716145	.25493394	.32703812	.40512716	.47807148	.52191769	.55958380	.60213329
	7	.15523481	.18443496	.21190815	.24613683	.30378012	.38468723	.44548626	.51735487	.58029465	.61671634	.65770948
	8	.19710564	.22963268	.26011442	.28775716	.34360157	.42342432	.52287988	.59448970	.65399123	.67075285	.70938332

PERCENTILE POINTS OF THE ACTA DISTRIBUTION

N	I	.01	.025	.05	.10	.25	.50	.75	.90	.95	.975	99
17	9	.267224774	.27811832	.31032956	.35039483	.41992727	.50000000	.58007729	.64960517	.68917043	.72188170	.75775164
18	1	.00054820	.00140556	.00284557	.00583624	.01585528	.03777616	.07412529	.12007746	.16331765	.18530197	.22573632
	2	.00845652	.01375122	.02611067	.04994628	.08347484	.01515567	.14271745	.19946752	.23776602	.27294362	.31602782
	3	.02533561	.03578508	.04702487	.06286036	.09676645	.14582567	.20637193	.27624204	.31026197	.34122044	.39118485
	4	.04879217	.06409204	.07969538	.10044101	.14289145	.20023310	.26796496	.34412254	.37667015	.41417743	.45829789
	5	.07718912	.09626919	.11642657	.14176744	.19000274	.25472121	.32654083	.40602108	.44888276	.47637277	.51088061
	6	.10038778	.13342738	.16343364	.18549000	.24043450	.30920737	.38343085	.46502116	.49789225	.53480197	.57710575
	7	.14544352	.17998585	.20991331	.23139001	.29100399	.36313387	.44089740	.53183109	.55400456	.59007475	.63090547
	8	.18444111	.21530152	.24391124	.27272982	.33676089	.41827616	.50667154	.59784670	.62784670	.64256872	.68142477
	9	.22620073	.26010060	.29127106	.32884632	.39552292	.47273375	.56093383	.64198006	.65340104	.67254283	.72898697
19	1	.00092883	.00133122	.00267631	.00562994	.01542700	.03582600	.07336464	.11413321	.14584850	.17466691	.21524003
	2	.00890088	.01341216	.02612312	.04942933	.08045702	.08677416	.13553719	.18927425	.22637325	.26027783	.30180103
	3	.02796708	.04382626	.06446482	.09162093	.13827116	.19667129	.25658021	.31859083	.35924262	.39137666	.43405483
	4	.04607648	.06952454	.07423370	.09914174	.13525752	.18088114	.25411221	.31859083	.35924262	.39137666	.43405483
	5	.07077658	.09146577	.11397633	.13323554	.18262705	.25411221	.31859083	.35924262	.39137666	.43405483	.43405483
	6	.10232126	.12476064	.14761965	.17613207	.22735887	.28667129	.35924262	.43405483	.43405483	.43405483	.43405483
	7	.13683104	.16238586	.1875433	.21832373	.27517323	.35924262	.43405483	.43405483	.43405483	.43405483	.43405483
	8	.17922371	.20925144	.23977144	.26327284	.33234702	.43405483	.43405483	.43405483	.43405483	.43405483	.43405483
	9	.21345263	.24437467	.27395884	.30083303	.37341053	.43405483	.43405483	.43405483	.43405483	.43405483	.43405483
20	1	.00055329	.00136502	.00267631	.00562994	.01542700	.03582600	.07336464	.11413321	.14584850	.17466691	.21524003
	2	.00792186	.01246883	.02612312	.04942933	.08045702	.08677416	.13553719	.18927425	.22637325	.26027783	.30180103
	3	.02771142	.04373309	.06446482	.09162093	.13827116	.19667129	.25658021	.31859083	.35924262	.39137666	.43405483
	4	.04636152	.06952454	.07423370	.09914174	.13525752	.18088114	.25411221	.31859083	.35924262	.39137666	.43405483
	5	.07077658	.09146577	.11397633	.13323554	.18262705	.25411221	.31859083	.35924262	.39137666	.43405483	.43405483
	6	.10232126	.12476064	.14761965	.17613207	.22735887	.28667129	.35924262	.43405483	.43405483	.43405483	.43405483
	7	.13683104	.16238586	.1875433	.21832373	.27517323	.35924262	.43405483	.43405483	.43405483	.43405483	.43405483
	8	.17922371	.20925144	.23977144	.26327284	.33234702	.43405483	.43405483	.43405483	.43405483	.43405483	.43405483
	9	.21345263	.24437467	.27395884	.30083303	.37341053	.43405483	.43405483	.43405483	.43405483	.43405483	.43405483
21	1	.00055329	.00136502	.00267631	.00562994	.01542700	.03582600	.07336464	.11413321	.14584850	.17466691	.21524003
	2	.00792186	.01246883	.02612312	.04942933	.08045702	.08677416	.13553719	.18927425	.22637325	.26027783	.30180103
	3	.02771142	.04373309	.06446482	.09162093	.13827116	.19667129	.25658021	.31859083	.35924262	.39137666	.43405483
	4	.04636152	.06952454	.07423370	.09914174	.13525752	.18088114	.25411221	.31859083	.35924262	.39137666	.43405483
	5	.07077658	.09146577	.11397633	.13323554	.18262705	.25411221	.31859083	.35924262	.39137666	.43405483	.43405483
	6	.10232126	.12476064	.14761965	.17613207	.22735887	.28667129	.35924262	.43405483	.43405483	.43405483	.43405483
	7	.13683104	.16238586	.1875433	.21832373	.27517323	.35924262	.43405483	.43405483	.43405483	.43405483	.43405483
	8	.17922371	.20925144	.23977144	.26327284	.33234702	.43405483	.43405483	.43405483	.43405483	.43405483	.43405483
	9	.21345263	.24437467	.27395884	.30083303	.37341053	.43405483	.43405483	.43405483	.43405483	.43405483	.43405483
22	1	.00055329	.00136502	.00267631	.00562994	.01542700	.03582600	.07336464	.11413321	.14584850	.17466691	.21524003
	2	.00792186	.01246883	.02612312	.04942933	.08045702	.08677416	.13553719	.18927425	.22637325	.26027783	.30180103
	3	.02771142	.04373309	.06446482	.09162093	.13827116	.19667129	.25658021	.31859083	.35924262	.39137666	.43405483
	4	.04636152	.06952454	.07423370	.09914174	.13525752	.18088114	.25411221	.31859083	.35924262	.39137666	.43405483
	5	.07077658	.09146577	.11397633	.13323554	.18262705	.25411221	.31859083	.35924262	.39137666	.43405483	.43405483
	6	.10232126	.12476064	.14761965	.17613207	.22735887	.28667129	.35924262	.43405483	.43405483	.43405483	.43405483
	7	.13683104	.16238586	.1875433	.21832373	.27517323	.35924262	.43405483	.43405483	.43405483	.43405483	.43405483
	8	.17922371	.20925144	.23977144	.26327284	.33234702	.43405483	.43405483	.43405483	.43405483	.43405483	.43405483
	9	.21345263	.24437467	.27395884	.30083303	.37341053	.43405483	.43405483	.43405483	.43405483	.43405483	.43405483
	10	.25565675	.29017788	.32584058	.36252882	.40140631	.44251053	.48683303	.53425105	.58401053	.63613303	.69059303
	11	.29895963	.33719578	.37619578	.41613303	.45825105	.50340631	.55159303	.60183303	.65325105	.70683303	.76259303
23	1	.00055329	.00136502	.00267631	.00562994	.01542700	.03582600	.07336464	.11413321	.14584850	.17466691	.21524003
	2	.00792186	.01246883	.02612312	.04942933	.08045702	.08677416	.13553719	.18927425	.22637325	.26027783	.30180103
	3	.02771142	.04373309	.06446482	.09162093	.13827116	.19667129	.25658021	.31859083	.35924262	.39137666	.43405483
	4	.04636152	.06952454	.07423370	.09914174	.13525752	.18088114	.25411221	.31859083	.35924262	.39137666	.43405483
	5	.07077658	.09146577	.11397633	.13323554	.18262705	.25411221	.31859083	.35924262	.39137666	.43405483	.43405483
	6	.10232126	.12476064	.14761965	.17613207	.22735887	.28667129	.35924262	.43405483	.43405483	.43405483	.43405483
	7	.13683104	.16238586	.1875433	.21832373	.27517323	.35924262	.43405483	.43405483	.43405483	.43405483	.43405483
	8	.17922371	.20925144	.23977144	.26327284	.33234702	.43405483	.43405483	.43405483	.43405483	.43405483	.43405483
	9	.21345263	.24437467	.27395884	.30083303	.37341053	.43405483	.43405483	.43405483	.43405483	.43405483	.43405483
	10	.25565675	.29017788	.32584058	.36252882	.40140631	.44251053	.48683303	.53425105	.58401053	.63613303	.69059303
	11	.29895963	.33719578	.37619578	.41613303	.45825105	.50340631	.55159303	.60183303	.65325105	.70683303	.76259303
24	1	.00055329	.00136502	.00267631	.00562994	.01542700	.03582600	.07336464	.11413321	.14584850	.17466691	.21524003
	2	.00792186	.01246883	.02612312	.04942933	.08045702	.08677416	.13553719	.18927425	.22637325	.26027783	.30180103
	3	.02771142	.04373309	.06446482	.09162093	.13827116	.19667129	.25658021	.31859083	.35924262	.39137666	.43405483
	4	.04636152	.06952454	.07423370	.09914174	.13525752	.18088114	.25411221	.31859083	.35924262	.39137666	.43405483
	5	.07077658	.09146577	.11397633	.13323554	.18262705	.25411221	.31859083	.35924262	.39137666	.43405483	.43405483
	6	.10232126	.12476064	.14761965	.17613207	.22735887	.28667129	.35924262	.43405483	.43405483	.43405483	.43405483
	7	.13683104	.16238586	.1875433	.21832373	.27517323	.35924262	.43405483	.43405483	.43405483	.43405483	.43405483
	8	.17922371	.20925144	.23977144	.26327284	.33234702	.43405483	.43405483	.43405483	.43405483	.43405483	.43405483
	9	.21345263	.24437467	.27395884	.30083303	.37341053	.43405483	.43405483	.43405483	.43405483	.43405483	.43405483
	10	.25565675	.29017788	.32584058	.36252882	.40140631	.44251053	.48683303	.53425105	.58401053	.63613303	.69059303
	11	.29895963	.33719578	.37619578	.41613303	.45825105	.50340631	.55159303	.60183303	.65325105	.70683303	.76259303
25	1	.00055329	.00136502	.00267631	.00562994	.01542700	.03582600	.07336464	.11413321	.14584850	.17466691	.21524003
	2	.00792186	.01246883	.02612312	.04942933	.08045702	.08677416	.13553719	.18927425	.22637325	.26027783	.30180103
	3	.02771142	.04373309	.06446482	.09162093	.13827116	.19667129	.25658021	.31859083	.35924262	.39137666	.43405483
	4	.04636152	.06952454	.07423370	.09914174	.13525752	.18088114	.25411221	.31859083	.35924262	.39137666	.43405483
	5	.07077658	.09146577	.11397633	.13323554	.18262705	.25411221	.31859083	.35924262	.39137666	.43405483	.43405483
	6	.10232126	.12476064	.14761965	.17613207	.22735887	.28667129	.35924262	.43405483	.43405483	.43405483	.43405483
	7	.13683104	.16238586	.1875433	.21832373	.27517323	.35924262	.4340548				

PERCENTILE POINTS OF THE RETA DISTRIBUTION

N	1	.01	.025	.05	.10	.25	.50	.75	.90	.95	.975	.99
22	2	.00688765	.01120458	.01639752	.02449668	.04374108	.07512738	.11777056	.16558937	.19812213	.22844440	.25844047
3	3	.02056704	.02905485	.03822351	.05117413	.07904263	.11970405	.17052794	.22422239	.25946653	.29161274	.31049095
4	4	.03042986	.04186730	.05459562	.07167480	.10517817	.16448642	.23119307	.27893794	.31591281	.34912210	.36972696
5	5	.04213623	.057820625	.07410940	.10490653	.15566898	.20910638	.27445887	.33104037	.36909113	.40284578	.42263344
6	6	.05687305	.07728924	.10260401	.15002166	.19564528	.25384437	.31866422	.38117170	.41799995	.45370362	.469726073
7	7	.07620744	.103864653	.13994128	.18673007	.23459998	.294959186	.36400504	.42969681	.46884545	.50722170	.524170572
8	8	.106767940	.141979944	.18952258	.24883354	.32006329	.40334500	.47684127	.51545674	.53872433	.55872433	.568631952
9	9	.14793782	.19709313	.25327286	.326416181	.40688329	.48810157	.52274997	.56086784	.59342733	.613010190	.62294765
10	10	.19380582	.24386185	.30461321	.37463175	.45286794	.53185099	.54751572	.60484422	.63645304	.67224765	.71137027
11	11	.25003172	.31276103	.38126361	.45618829	.53266314	.60761995	.64776196	.67455592	.67789525	.71137027	
23	1	.00044688	.00110017	.00222766	.00457042	.01242900	.02968725	.058649316	.09526428	.12212739	.14818513	.18145327
2	2	.00653238	.01567406	.02374563	.04183706	.07190570	.11284894	.15884097	.19020337	.21948429	.25567091	
3	3	.01063906	.02775151	.04651528	.078909177	.11457554	.16342840	.21715937	.24924875	.28037934	.31812734	
4	4	.01676533	.04050764	.06167552	.09808345	.13444862	.17574332	.21202300	.26781373	.30367770	.33588914	.37445115
5	5	.02320631	.05360201	.07889908	.10971093	.14669183	.18691524	.22931452	.26933241	.30389241	.33781189	.36680892
6	6	.03047334	.072028613	.12021456	.16318424	.18995730	.227963820	.26597336	.30262321	.3389387	.3703073	.37581356
7	7	.03847377	.09210027	.15249667	.18415781	.20844528	.24679845	.28150335	.315097540	.34305197	.37267468	
8	8	.04766122	.11676361	.18634377	.21441554	.23683459	.26863415	.29535168	.31695615	.33693508	.35291914	.36687447
9	9	.05766244	.13707643	.20716167	.23418167	.25242454	.26714733	.276001343	.27855586	.27915104	.27855586	.27915104
10	10	.06842406	.15793118	.22821292	.25026864	.26727577	.27417453	.27641624	.27315482	.26715482	.261458104	.25015253
11	11	.07941174	.176815621	.249607336	.26971271	.27874161	.275715698	.26677176	.25853054	.24640641	.231505319	.218923631
12	12	.09087708	.20516765	.27316765	.27011620	.26077596	.24000000	.21692204	.18988380	.166485235	.13412200	.72670667
24	1	.00041868	.00165435	.00214494	.00433839	.01121518	.02864806	.05612569	.09148242	.11734616	.14247264	.17459581
2	2	.00633033	.01256434	.0180177	.02738273	.04009186	.06895181	.10830348	.15262004	.18280247	.21120168	.24624551
3	3	.01879292	.0365032	.0549333	.08682277	.12241271	.16986841	.22685225	.27980102	.32697280	.3663018	.39726096
4	4	.03597841	.0731363	.0970834	.14747476	.20752181	.27360087	.34360087	.40753822	.46227189	.5061136	.53116963
5	5	.05662146	.10711862	.15881538	.20730789	.2539789	.2972406	.3358939	.3658793	.38180735	.37884171	.36118186
6	6	.07998738	.14073031	.19400056	.24694473	.29000927	.3298564	.3555579	.37245494	.38919335	.39151284	.34951093
7	7	.10616106	.17616210	.23468646	.27033387	.29339421	.30740607	.31370076	.31693325	.31649138	.30671283	.28084921
8	8	.13326463	.15630227	.17796063	.20422590	.22433783	.23513199	.23693762	.23459556	.22787291	.215094781	.20484897
9	9	.16254864	.18799293	.21154555	.23059963	.2405983	.23521099	.22922982	.22449077	.21822289	.21021962	.20064084
10	10	.19350865	.22100492	.24633863	.26721297	.27721297	.27292345	.2641184	.25252923	.23940362	.22450697	.20878239
11	11	.2269232	.25553022	.28235553	.30475515	.31184652	.3037497	.28642818	.26762001	.24321493	.21356935	.17872329
12	12	.25994367	.29124177	.31947103	.335317244	.34195978	.32945825	.29745661	.260755265	.21423604	.16719192	.70466251
25	1	.00041193	.00101220	.00204963	.00420555	.01144132	.02734498	.053394218	.08798916	.11292728	.13710517	.168231623
2	2	.00633958	.01443318	.02147789	.03848666	.06623102	.10411832	.14386720	.17612071	.20151691	.21748606	
3	3	.01801595	.02546598	.03351958	.04491345	.06949752	.10553270	.15085642	.19913495	.230107093	.26030584	.29593014
4	4	.03427004	.04337045	.05654295	.07166181	.10233573	.14422462	.19581168	.24801831	.28172251	.31219031	.34078408
5	5	.05216335	.06831166	.08223091	.10611784	.13261583	.16434988	.20956388	.25967054	.29360830	.326082845	.35972280
6	6	.07654658	.09556621	.11906621	.14127774	.17171141	.202379091	.23242352	.25965887	.275507169	.28701743	.28837409
7	7	.10171507	.12071667	.14075332	.16317092	.1875803	.21324057	.23456481	.25030853	.241952001	.2128802	.20837409
8	8	.12733072	.14949543	.17033364	.19624501	.22498110	.2529541	.26609686	.25828117	.246220335	.21987682	.21056141
9	9	.15522034	.17771682	.20237776	.23031577	.26096553	.28421532	.27092327	.246734210	.21364086	.17500072	.157106127
10	10	.18474632	.21125482	.239554613	.26529705	.281844017	.286161354	.247607134	.20955154	.164393321	.117479345	.61002713

TABLE 1 Contd.

PERCENTILE POINTS OF THE BETA DISTRIBUTION

		.01	.025	.05	.10	.25	.50	.75	.90	.95	.975	.99
25	1	.21563465	.24402165	.26985305	.30112121	.35637050	.42107489	.48745614	.54771705	.58316106	.61334450	.64756620
	2	.24784247	.27796802	.30512944	.33773605	.39477345	.46053718	.52727845	.58667878	.62137844	.65071837	.68373888
	3	.29140704	.31957704	.34133865	.37514148	.40335194	.45000000	.50643941	.56245852	.60411134	.63694206	.671959204
26	1	.00038748	.00073229	.00197687	.00406413	.01100268	.02660725	.05192249	.08475249	.10883036	.12227460	.16232234
	2	.00580548	.01384204	.02706430	.04371678	.06480466	.10152700	.14528052	.19177145	.22893365	.25130292	.27932488
	3	.02465806	.05311891	.08311165	.06381382	.10680466	.13152700	.14528052	.19177145	.22893365	.25130292	.27932488
	4	.04363406	.08311165	.10680466	.13152700	.14528052	.19177145	.22893365	.25130292	.27932488	.30150040	.33720843
	5	.06381382	.10680466	.13152700	.14528052	.19177145	.22893365	.25130292	.27932488	.30150040	.33720843	.38492252
	6	.08311165	.10680466	.13152700	.14528052	.19177145	.22893365	.25130292	.27932488	.30150040	.33720843	.38492252
	7	.10680466	.13152700	.14528052	.19177145	.22893365	.25130292	.27932488	.30150040	.33720843	.38492252	.42908371
	8	.13152700	.14528052	.19177145	.22893365	.25130292	.27932488	.30150040	.33720843	.38492252	.42908371	.47900471
	9	.14528052	.19177145	.22893365	.25130292	.27932488	.30150040	.33720843	.38492252	.42908371	.47900471	.51401004
	10	.19177145	.22893365	.25130292	.27932488	.30150040	.33720843	.38492252	.42908371	.47900471	.51401004	.54544453
	11	.22893365	.25130292	.27932488	.30150040	.33720843	.38492252	.42908371	.47900471	.51401004	.54544453	.57167246
	12	.25130292	.27932488	.30150040	.33720843	.38492252	.42908371	.47900471	.51401004	.54544453	.57167246	.59167246
	13	.27932488	.30150040	.33720843	.38492252	.42908371	.47900471	.51401004	.54544453	.57167246	.59167246	.61334450
	14	.30150040	.33720843	.38492252	.42908371	.47900471	.51401004	.54544453	.57167246	.59167246	.61334450	.64756620
27	1	.00037216	.00073229	.00197687	.00406413	.01100268	.02660725	.05192249	.08475249	.10883036	.12227460	.16232234
	2	.00580548	.01384204	.02706430	.04371678	.06480466	.10152700	.14528052	.19177145	.22893365	.25130292	.27932488
	3	.02465806	.05311891	.08311165	.10680466	.13152700	.14528052	.19177145	.22893365	.25130292	.27932488	.30150040
	4	.04363406	.08311165	.10680466	.13152700	.14528052	.19177145	.22893365	.25130292	.27932488	.30150040	.33720843
	5	.06381382	.10680466	.13152700	.14528052	.19177145	.22893365	.25130292	.27932488	.30150040	.33720843	.38492252
	6	.08311165	.10680466	.13152700	.14528052	.19177145	.22893365	.25130292	.27932488	.30150040	.33720843	.38492252
	7	.10680466	.13152700	.14528052	.19177145	.22893365	.25130292	.27932488	.30150040	.33720843	.38492252	.42908371
	8	.13152700	.14528052	.19177145	.22893365	.25130292	.27932488	.30150040	.33720843	.38492252	.42908371	.47900471
	9	.14528052	.19177145	.22893365	.25130292	.27932488	.30150040	.33720843	.38492252	.42908371	.47900471	.51401004
	10	.19177145	.22893365	.25130292	.27932488	.30150040	.33720843	.38492252	.42908371	.47900471	.51401004	.54544453
	11	.22893365	.25130292	.27932488	.30150040	.33720843	.38492252	.42908371	.47900471	.51401004	.54544453	.57167246
	12	.25130292	.27932488	.30150040	.33720843	.38492252	.42908371	.47900471	.51401004	.54544453	.57167246	.59167246
	13	.27932488	.30150040	.33720843	.38492252	.42908371	.47900471	.51401004	.54544453	.57167246	.59167246	.61334450
	14	.30150040	.33720843	.38492252	.42908371	.47900471	.51401004	.54544453	.57167246	.59167246	.61334450	.64756620
28	1	.00037216	.00073229	.00197687	.00406413	.01100268	.02660725	.05192249	.08475249	.10883036	.12227460	.16232234
	2	.00580548	.01384204	.02706430	.04371678	.06480466	.10152700	.14528052	.19177145	.22893365	.25130292	.27932488
	3	.02465806	.05311891	.08311165	.10680466	.13152700	.14528052	.19177145	.22893365	.25130292	.27932488	.30150040
	4	.04363406	.08311165	.10680466	.13152700	.14528052	.19177145	.22893365	.25130292	.27932488	.30150040	.33720843
	5	.06381382	.10680466	.13152700	.14528052	.19177145	.22893365	.25130292	.27932488	.30150040	.33720843	.38492252
	6	.08311165	.10680466	.13152700	.14528052	.19177145	.22893365	.25130292	.27932488	.30150040	.33720843	.38492252
	7	.10680466	.13152700	.14528052	.19177145	.22893365	.25130292	.27932488	.30150040	.33720843	.38492252	.42908371
	8	.13152700	.14528052	.19177145	.22893365	.25130292	.27932488	.30150040	.33720843	.38492252	.42908371	.47900471
	9	.14528052	.19177145	.22893365	.25130292	.27932488	.30150040	.33720843	.38492252	.42908371	.47900471	.51401004
	10	.19177145	.22893365	.25130292	.27932488	.30150040	.33720843	.38492252	.42908371	.47900471	.51401004	.54544453
	11	.22893365	.25130292	.27932488	.30150040	.33720843	.38492252	.42908371	.47900471	.51401004	.54544453	.57167246
	12	.25130292	.27932488	.30150040	.33720843	.38492252	.42908371	.47900471	.51401004	.54544453	.57167246	.59167246
	13	.27932488	.30150040	.33720843	.38492252	.42908371	.47900471	.51401004	.54544453	.57167246	.59167246	.61334450
	14	.30150040	.33720843	.38492252	.42908371	.47900471	.51401004	.54544453	.57167246	.59167246	.61334450	.64756620

PERCENTILE POINTS OF THE BETA DISTRIBUTION

	.01	.02	.05	.10	.25	.50	.75	.90	.95	.975	.99
29	.00034650	.00081265	.00176717	.00362653	.00987103	.02361818	.06667867	.07632954	.09814463	.11944487	.14683215
29	.00519972	.00846536	.01243353	.01849034	.03317318	.05720226	.09017773	.12761889	.15339174	.17764430	.20787798
3	.01545964	.02186373	.02870549	.038661547	.05986036	.09114524	.13075685	.17326534	.20156059	.22766189	.25963269
4	.02952067	.03889483	.04859006	.06154198	.08317623	.12516615	.16981642	.21304830	.24613032	.27351520	.30662781
5	.046334507	.05843607	.07069392	.08631582	.11753070	.15921599	.20787931	.25696406	.28837201	.31664061	.35049241
6	.06531503	.07994184	.09415699	.11245834	.14764198	.19327947	.24520520	.29650168	.32887321	.35774755	.39203436
7	.08664009	.10293355	.11915642	.13769064	.17835020	.22735037	.28194682	.33694558	.36799559	.39724703	.43172701
8	.10825952	.12730088	.14637054	.16784694	.20855518	.26614259	.31819463	.37247154	.40504508	.43500548	.46955780
9	.13179171	.15281594	.17244678	.19277115	.24118941	.29555047	.34491932	.40027752	.44299359	.47238448	.50644124
10	.15655083	.17933364	.20043371	.222641503	.27320560	.32988492	.38266427	.44257382	.47901191	.50832335	.54221636
11	.18221093	.20689368	.22937001	.25670426	.30557287	.36366662	.42265192	.48061708	.51427020	.54330573	.57658671
12	.20913594	.23524018	.25891543	.28760175	.33826446	.39774927	.45933350	.51339038	.54876514	.57730536	.61011995
13	.23693133	.26440532	.28927134	.31907100	.37126404	.43183261	.49980116	.54959101	.58255527	.61063508	.64257403
14	.26553737	.29443357	.32027628	.35107008	.40456290	.46591522	.52797031	.58323658	.61560810	.64306129	.67408172
15	.29533353	.32531697	.35280464	.38365934	.43381519	.49900000	.56184817	.61674006	.64700537	.67469500	.70486343
30	.00333335	.00843357	.0170832	.03056585	.05284303	.08515619	.12736973	.17356999	.09503385	.11570331	.14230410
2	.00502335	.00817813	.01197579	.02056647	.035531690	.05725673	.08725673	.12736973	.17356999	.20158978	.25189883
3	.01493007	.02111713	.02781554	.0370773	.05285482	.08346099	.12453961	.16781294	.19532631	.22073540	.25189883
4	.02472236	.03422168	.044804483	.05833556	.08221113	.12104061	.16423608	.20299947	.23859786	.26528845	.29741868
5	.0347027	.04713552	.06087435	.07737746	.10536508	.15396801	.20122343	.24399154	.27961517	.30721335	.34022650
6	.04709724	.06333785	.08094691	.10382743	.13584245	.18660840	.24729775	.30768901	.35700855	.38566651	.41950804
7	.06299724	.08333785	.10946907	.1419507	.185841932	.24761850	.30810747	.36114292	.40390742	.42283721	.45672731
8	.08333533	.10779478	.13637794	.17086496	.22395041	.28576409	.34283325	.39484039	.42993303	.45889365	.49255977
9	.10779478	.13637794	.17086496	.22395041	.28576409	.34283325	.39484039	.42993303	.45889365	.49255977	.52764465
10	.13637794	.17086496	.22395041	.28576409	.34283325	.39484039	.42993303	.45889365	.49255977	.52764465	.56118250
11	.17086496	.22395041	.28576409	.34283325	.39484039	.42993303	.45889365	.49255977	.52764465	.56118250	.59354652
12	.22395041	.28576409	.34283325	.39484039	.42993303	.45889365	.49255977	.52764465	.56118250	.59354652	.62578949
13	.28576409	.34283325	.39484039	.42993303	.45889365	.49255977	.52764465	.56118250	.59354652	.62578949	.657574819
14	.34283325	.39484039	.42993303	.45889365	.49255977	.52764465	.56118250	.59354652	.62578949	.657574819	.68954660
15	.39484039	.42993303	.45889365	.49255977	.52764465	.56118250	.59354652	.62578949	.657574819	.68954660	.72183352
31	.00027313	.00072313	.00146445	.00300577	.00818578	.01969939	.03883325	.06367079	.08203164	.10003244	.12328761
2	.00429715	.00699676	.01027866	.01529851	.02748228	.04746999	.07509378	.10664631	.12850104	.14817208	.1758996
3	.01279712	.01893764	.02717099	.0390553	.05756398	.07567053	.10896524	.14599172	.16915163	.19157141	.21921469
4	.02420066	.03203116	.04399287	.05607847	.07394725	.10391482	.14160617	.18101206	.20688902	.23057502	.25944484
5	.03800083	.04860076	.06083064	.07115205	.09171410	.12183808	.17444809	.21553280	.24772207	.26737904	.29714623
6	.05354073	.06662178	.07730442	.09260608	.12001610	.16064275	.21370620	.24895929	.27718464	.30757135	.33288791
7	.07042263	.08400602	.09787835	.11401078	.14279566	.18767687	.23550577	.28152726	.31054517	.33649830	.36776528
8	.08842506	.10621044	.11914001	.13702338	.17297556	.21703346	.26592705	.31338657	.34309699	.36937884	.40031096
9	.10745539	.12893954	.14121665	.16156014	.19898166	.24533070	.29502678	.34664154	.37477017	.40136326	.43265784
10	.12737764	.14635474	.16395694	.18568834	.22577484	.27362448	.32583777	.37536338	.40581764	.43255885	.46386095
11	.14810807	.16851714	.18790873	.21031455	.25182548	.30191974	.35539552	.40506675	.43625980	.46304464	.49455724
12	.16959256	.19132407	.21110226	.23437873	.27841174	.33021572	.38471879	.43541164	.46614746	.49288000	.52258948
13	.19175207	.21473213	.23550975	.26085033	.30561679	.35851240	.41199217	.46480873	.49551916	.52210098	.55271836
14	.214657916	.23370812	.26040245	.28670426	.33282803	.38680919	.44272404	.49382076	.52440419	.55076884	.58108352

PERCENTILE POINTS OF THE BFPA DISTRIBUTION

N	1	.01	.025	.05	.10	.25	.50	.75	.90	.95	.975	.99
35	15	.23803575	.26322723	.28584883	.31292932	.36023589	.41510677	.47142768	.52246641	.55282449	.57688228	.60871476
16	26210143	.28827144	.31155317	.33950675	.38783369	.44310642	.49990181	.55075713	.58079677	.60646904	.63571387	.66215575
17	.28676236	.31382852	.33789433	.36643021	.41702215	.47102165	.52827099	.57801810	.60832981	.63554194	.66215575	.68798927
18	.31201073	.33987138	.36456392	.39469451	.44354213	.50000000	.55633548	.60630548	.65543205	.68601085	.71897927	.75444444
40	1	.00025123	.00043274	.00128151	.00262254	.00716624	.01717024	.03406367	.05503912	.07215752	.08800730	.10874906
2	.00075541	.00137461	.00240493	.00416084	.00716624	.01240493	.02140493	.03406367	.05503912	.07215752	.08800730	.10874906
3	.01117106	.01572117	.02075560	.02787023	.03406367	.04310642	.05503912	.07215752	.08800730	.10874906	.13158584	.15477307
4	.02116636	.02722539	.03488484	.04423181	.05503912	.06807023	.08310642	.10000000	.11807023	.13722117	.15754444	.17900000
5	.03312785	.04185063	.05257033	.06606813	.08257023	.10100000	.12140493	.14310642	.16607023	.19000000	.21500000	.24100000
6	.04655134	.05717225	.07040000	.08607023	.10400000	.12400000	.14600000	.17000000	.19500000	.22100000	.24800000	.27600000
7	.06111480	.07388273	.08810000	.10400000	.12140493	.14000000	.16000000	.18200000	.20500000	.22900000	.25400000	.28000000
8	.07767263	.09252242	.10850000	.12600000	.14500000	.16500000	.18600000	.20800000	.23100000	.25500000	.28000000	.30600000
9	.09412661	.10890664	.12500000	.14200000	.16000000	.17900000	.19900000	.22000000	.24200000	.26500000	.28900000	.31400000
10	.11030105	.12400000	.13900000	.15500000	.17200000	.19000000	.20900000	.22900000	.25000000	.27200000	.29500000	.31900000
11	.12813705	.14000000	.15300000	.16700000	.18200000	.19800000	.21500000	.23300000	.25200000	.27200000	.29300000	.31500000
12	.14655200	.15600000	.16600000	.17700000	.18900000	.20200000	.21600000	.23100000	.24700000	.26400000	.28100000	.29900000
13	.16554245	.17300000	.18100000	.19000000	.19900000	.20900000	.21900000	.23000000	.24100000	.25200000	.26300000	.27400000
14	.18500554	.19100000	.19700000	.20400000	.21100000	.21800000	.22500000	.23300000	.24100000	.24900000	.25700000	.26500000
15	.20500588	.20900000	.21300000	.21700000	.22100000	.22500000	.22900000	.23300000	.23700000	.24100000	.24500000	.24900000
16	.22554016	.22800000	.23100000	.23400000	.23700000	.24000000	.24300000	.24600000	.24900000	.25200000	.25500000	.25800000
17	.24647545	.24800000	.25000000	.25200000	.25400000	.25600000	.25800000	.26000000	.26200000	.26400000	.26600000	.26800000
18	.26785413	.26800000	.26900000	.27000000	.27100000	.27200000	.27300000	.27400000	.27500000	.27600000	.27700000	.27800000
19	.28966537	.28900000	.29000000	.29100000	.29200000	.29300000	.29400000	.29500000	.29600000	.29700000	.29800000	.29900000
20	.31190354	.31000000	.31100000	.31200000	.31300000	.31400000	.31500000	.31600000	.31700000	.31800000	.31900000	.32000000
45	1	.00022332	.00046246	.00113020	.00233851	.00633254	.01528823	.03333686	.05988149	.09400420	.13570510	.18500000
2	.00033296	.00062848	.00129439	.00259051	.00716624	.01717024	.03406367	.05503912	.07215752	.08800730	.10874906	.13158584
3	.00086544	.01365100	.01861605	.02474123	.03406367	.04310642	.05503912	.07215752	.08800730	.10874906	.13158584	.15477307
4	.01875444	.02475295	.03093308	.03823308	.04655245	.05503912	.06400000	.07215752	.08000000	.08800730	.09500000	.10200000
5	.02932754	.03707665	.04681114	.05750214	.06807023	.07900000	.09000000	.10000000	.11000000	.12000000	.13000000	.14000000
6	.04117753	.05064234	.06060000	.07115078	.08257023	.09400000	.10600000	.11800000	.13000000	.14200000	.15400000	.16600000
7	.05474228	.06430018	.07454476	.08500000	.09600000	.10700000	.11800000	.12900000	.14000000	.15100000	.16200000	.17300000
8	.06776320	.07800000	.08854482	.10000000	.11100000	.12200000	.13300000	.14400000	.15500000	.16600000	.17700000	.18800000
9	.08270210	.09300000	.10400000	.11500000	.12600000	.13700000	.14800000	.15900000	.17000000	.18100000	.19200000	.20300000
10	.09727327	.10700000	.11700000	.12700000	.13700000	.14700000	.15700000	.16700000	.17700000	.18700000	.19700000	.20700000
11	.11290804	.12200000	.13100000	.14000000	.14900000	.15800000	.16700000	.17600000	.18500000	.19400000	.20300000	.21200000
12	.12905305	.13700000	.14500000	.15300000	.16100000	.16900000	.17700000	.18500000	.19300000	.20100000	.20900000	.21700000
13	.14666255	.15300000	.16000000	.16700000	.17400000	.18100000	.18800000	.19500000	.20200000	.20900000	.21600000	.22300000
14	.16466255	.17000000	.17600000	.18200000	.18800000	.19400000	.20000000	.20600000	.21200000	.21800000	.22400000	.23000000
15	.18301521	.18800000	.19300000	.19800000	.20300000	.20800000	.21300000	.21800000	.22300000	.22800000	.23300000	.23800000
16	.19800802	.20300000	.20800000	.21300000	.21800000	.22300000	.22800000	.23300000	.23800000	.24300000	.24800000	.25300000
17	.21621823	.22100000	.22600000	.23100000	.23600000	.24100000	.24600000	.25100000	.25600000	.26100000	.26600000	.27100000
18	.23678006	.24100000	.24600000	.25100000	.25600000	.26100000	.26600000	.27100000	.27600000	.28100000	.28600000	.29100000
19	.25936895	.26300000	.26700000	.27100000	.27500000	.27900000	.28300000	.28700000	.29100000	.29500000	.29900000	.30300000
20	.27292105	.27600000	.27900000	.28200000	.28500000	.28800000	.29100000	.29400000	.29700000	.30000000	.30300000	.30600000
21	.29248475	.29500000	.29800000	.30100000	.30400000	.30700000	.31000000	.31300000	.31600000	.31900000	.32200000	.32500000

PERCENTILE POINTS OF THE RETA DISTRIBUTION

N	I	.01	.025	.05	.10	.25	.50	.75	.90	.95	.975	.99
45	22	.31237053	.33703374	.35879256	.38442120	.42826871	.47794312	.52793148	.57251850	.59881620	.62127998	.64690033
24	33	.33575756	.35774636	.37987226	.40586022	.45013000	.50000000	.54987007	.59413977	.62012774	.64275561	.66742423
50	1	.00020099	.00050623	.00102534	.00210498	.00573312	.01376733	.02734505	.04500741	.05815508	.07112174	.08748016
2	00299676	.00480143	.00715372	.01064678	.01923367	.03346024	.05294861	.07558061	.09139813	.10546695	.12542772	.15429772
3	.00886075	.01250857	.01655186	.02224396	.03664370	.05312227	.07691154	.10295021	.12961416	.15713763	.18769676	.21769676
4	.01683612	.02222795	.02778165	.03354760	.04064459	.04781742	.05229408	.05354815	.05379116	.05233278	.04933093	.04552093
5	.02630978	.03327407	.04023357	.04844459	.05507993	.05927948	.06126462	.06176418	.06176418	.06176418	.06176418	.06176418
6	.03691678	.04533532	.05357141	.06246042	.07062973	.07764432	.08350321	.08813801	.09132922	.09316950	.09470074	.09592664
7	.04842528	.05819167	.06753267	.07649973	.08452973	.09164432	.09783801	.10311751	.10750428	.11136454	.11467469	.11745544
8	.06067862	.07170075	.08218506	.09244907	.10241544	.11203236	.12134801	.12931053	.13607740	.14170008	.14623600	.14975785
9	.07356553	.08576208	.09724809	.10846533	.11921757	.12943436	.13913801	.14831053	.15693208	.16500008	.17251215	.17947072
10	.08703395	.10030223	.11272157	.12481701	.13655740	.14793801	.15884801	.16931053	.17931053	.18881053	.19781053	.20631053
11	.10033153	.11526584	.12855740	.14081053	.15193801	.16193801	.17081053	.17851053	.18511053	.19061053	.19511053	.19861053
12	.11520923	.13030992	.14471814	.15840952	.17138076	.18361053	.19511053	.20581053	.21581053	.22511053	.23361053	.24131053
13	.13005973	.14630056	.16117456	.17493170	.18768784	.19931053	.21081053	.22131053	.23081053	.23931053	.24681053	.25331053
14	.14521073	.16231062	.17793320	.19241053	.20581053	.21811053	.22931053	.23931053	.24811053	.25581053	.26231053	.26781053
15	.16069768	.17861784	.19488486	.21081053	.22581053	.23931053	.25131053	.26181053	.27081053	.27831053	.28431053	.28881053
16	.17650916	.19520616	.21210410	.22781053	.24231053	.25581053	.26831053	.27931053	.28881053	.29631053	.30231053	.30681053
17	.19262861	.21205467	.22956796	.24581053	.26081053	.27431053	.28631053	.29681053	.30581053	.31331053	.31931053	.32381053
18	.20900416	.22935705	.24782091	.26481053	.28031053	.29431053	.30681053	.31781053	.32681053	.33381053	.33931053	.34331053
19	.22573661	.24635705	.26482091	.28181053	.29731053	.31131053	.32381053	.33481053	.34381053	.35081053	.35581053	.35931053
20	.24270390	.26430106	.28281053	.29931053	.31431053	.32781053	.33981053	.35031053	.35931053	.36631053	.37131053	.37481053
21	.25993566	.28188224	.30138438	.31831053	.33381053	.34731053	.35881053	.36881053	.37681053	.38281053	.38731053	.39031053
22	.27742581	.29990723	.31982591	.33731053	.35281053	.36631053	.37781053	.38731053	.39481053	.40031053	.40431053	.40681053
23	.29516944	.31814918	.33845356	.35631053	.37231053	.38631053	.39781053	.40681053	.41381053	.41881053	.42231053	.42431053
24	.31316315	.33660509	.35722876	.37531053	.39131053	.40531053	.41681053	.42581053	.43281053	.43731053	.44031053	.44181053
25	.33140472	.35527302	.37624580	.39481053	.41131053	.42581053	.43731053	.44631053	.45331053	.45781053	.46031053	.46181053
50	1	.00018272	.00046022	.00093217	.00191331	.00521692	.01252355	.02489036	.04100094	.05301105	.06487076	.08032089
2	.00727218	.00434354	.00649948	.00971103	.01748446	.03032797	.04820926	.06880094	.08337134	.09110102	.10160326	.11460326
3	.00802341	.01130301	.01500339	.02020466	.03168572	.04332352	.06030258	.08388383	.10307935	.12326424	.14420155	.16420155
4	.01527388	.02017053	.02522273	.03209575	.042629871	.05633582	.07011233	.08744856	.10608565	.12524075	.14420155	.16420155
5	.02348555	.03110151	.04058784	.05081296	.06161397	.07288436	.08460964	.10117234	.11870745	.13527678	.15087454	.16882428
6	.03386355	.04272516	.05218673	.06223912	.07289237	.08416836	.09603816	.10851817	.12161817	.13527678	.14927678	.16420155
7	.04497465	.05495136	.06548800	.07664800	.08844800	.10084800	.11384800	.12744800	.14164800	.15527678	.16927678	.18420155
8	.05657353	.06749513	.07884800	.09084800	.10344800	.11664800	.13044800	.14484800	.15984800	.17527678	.19087678	.20687678
9	.06857353	.07990447	.09170447	.10400447	.11680447	.13020447	.14420447	.15880447	.17400447	.18980447	.20620447	.22320447
10	.08157353	.09340447	.10520447	.11760447	.13060447	.14420447	.15840447	.17340447	.18900447	.20520447	.22200447	.23920447
11	.09517353	.10690447	.11860447	.13100447	.14480447	.15920447	.17420447	.19000447	.20640447	.22340447	.24100447	.25920447
12	.10920447	.12090447	.13260447	.14500447	.15820447	.17220447	.18700447	.20260447	.21900447	.23600447	.25360447	.27180447
13	.12370447	.13540447	.14710447	.15960447	.17280447	.18680447	.20160447	.21720447	.23360447	.25080447	.26880447	.28740447
14	.13870447	.15040447	.16210447	.17460447	.18780447	.20180447	.21660447	.23220447	.24860447	.26580447	.28380447	.30240447
15	.15420447	.16590447	.17760447	.18960447	.20240447	.21600447	.23040447	.24560447	.26160447	.27840447	.29580447	.31380447
16	.16920447	.18090447	.19260447	.20460447	.21740447	.23100447	.24540447	.26060447	.27660447	.29340447	.31080447	.32880447
17	.18470447	.19640447	.20810447	.22010447	.23240447	.24560447	.25960447	.27440447	.28980447	.30580447	.32240447	.33960447
18	.19970447	.21140447	.22310447	.23510447	.24740447	.26060447	.27460447	.28940447	.30480447	.32080447	.33740447	.35460447
19	.21470447	.22640447	.23810447	.25010447	.26240447	.27560447	.28960447	.30440447	.31980447	.33580447	.35240447	.36960447
20	.22970447	.24140447	.25310447	.26510447	.27740447	.29060447	.30460447	.31940447	.33480447	.35080447	.36740447	.38460447
21	.24470447	.25640447	.26810447	.28010447	.29240447	.30560447	.31960447	.33440447	.34980447	.36580447	.38240447	.39960447
22	.25970447	.27140447	.28310447	.29510447	.30740447	.32060447	.33460447	.34940447	.36480447	.38080447	.39740447	.41460447
23	.27470447	.28640447	.29810447	.31010447	.32240447	.33560447	.34960447	.36440447	.37980447	.39580447	.41240447	.42960447
24	.28970447	.30140447	.31310447	.32510447	.33740447	.35060447	.36460447	.37940447	.39480447	.41080447	.42740447	.44460447
25	.30470447	.31640447	.32810447	.34010447	.35240447	.36560447	.37960447	.39440447	.41080447	.42740447	.44460447	.46180447

PERCENTILE POINTS OF THE RETA DISTRIBUTION

N	1	.01	.025	.05	.10	.25	.50	.75	.90	.95	.975	.99
55	20338001	22237685	27960691	25979961	29553550	33735967	38096110	42129300	45574965	465707105	49190750	
56	21855560	27813841	25563518	27652208	31207935	35543078	39866176	44000367	46650454	48581495	51058168	
57	23397293	27202465	29337354	33089059	37350178	41789476	45858762	48709814	5019547	50934854	52001293	
58	24959534	27022887	28857012	31034475	34577510	38262297	41780486	45133086	48092744	49773776	51266824	
59	26542726	28654628	30526748	32743047	36570704	40966397	45466756	49533086	51982068	52692744	54559337	
60	28146424	30433688	32711361	34654925	38431068	42780957	46363429	49336142	51705714	52633150	54311290	
61	29772266	31700068	34197382	36117634	40572653	45030987	48591128	51492317	53790382	54678331	56371053	
62	31413987	33463323	35926142	37963160	41899834	46388106	50917305	54563437	57149372	57954541	59671400	
63	33077404	35355617	37857027	40006153	43688106	48192076	52717305	56363437	59149372	59954541	61671400	
64	34760403	37076528	39606060	41862225	45482687	50000000	54517513	58363774	60955940	61762366	63479597	
65	36501679	38804287	40685452	43575466	47284504	51784504	56284504	60784504	64378327	65062020	66783327	
66	38226349	40506262	42486488	45186488	48886488	52586488	56286488	60000000	63683327	64378327	66062020	
67	39951019	42181315	44161541	46851541	50551541	54251541	57951541	61651541	65351541	66046538	67731541	
68	41675689	43806382	45786608	48476608	52176608	55876608	59576608	63276608	66976608	67671625	69356608	
69	43400359	45531052	47511278	50201278	53891278	57581278	61281278	64971278	68671278	69366295	71051278	
70	45125029	47255722	49235948	51925948	55615948	59305948	63005948	66695948	70395948	71091065	72776029	
71	46849699	48980392	50960618	53650618	57340618	61030618	64720618	68410618	72110618	72805735	74490699	
72	48574369	50705062	52685288	55375288	59065288	62755288	66445288	70135288	73825288	74520405	76205369	
73	50299039	52419732	54399958	57089958	60779958	64469958	68159958	71849958	75539958	76235075	77920039	
74	52023709	54144402	56124628	58814628	62504628	66194628	69884628	73574628	77264628	77959745	79644709	
75	53748379	55869072	57849298	60539298	64229298	67919298	71609298	75299298	78989298	79684415	81369379	
76	55473049	57593742	59573968	62263968	65953968	69643968	73333968	77023968	80713968	81409085	83094049	
77	57197719	59318412	61298638	63988638	67678638	71368638	75058638	78748638	82438638	83133755	84818719	
78	58922389	61043082	63023308	65713308	69403308	73093308	76783308	80473308	84163308	84858425	86543389	
79	60647059	62767752	64747978	67437978	71127978	74817978	78507978	82197978	85887978	86583095	88268059	
80	62371729	64492422	66472648	69162648	72852648	76542648	80232648	83922648	87612648	88307765	90000000	

PERCENTILE POINTS OF THE ACTA DISTRIBUTION

N	I	.25	.50	.75	N	I	.25	.50	.75
65	1	.00441696	.01960713	.02110178	70	1	.00410131	.00853324	.01950030
	2	.01479362	.05668646	.06088018		2	.01374667	.02986068	.03800386
	3	.02663117	.06002679	.06967696		3	.02472504	.03801751	.05524000
	4	.03914872	.06420215	.07733463		4	.03632257	.05220696	.07180488
	5	.05208563	.07143049	.09484177		5	.04842716	.06640847	.08817928
	6	.06533166	.08678902	.11206319		6	.06062348	.08061573	.10420040
	7	.07877264	.10208296	.12904568		7	.07310584	.09482414	.12002017
	8	.09240751	.11748290	.14599220		8	.08575263	.10803853	.13567821
	9	.10619003	.13265438	.16257209		9	.09853538	.12325217	.15120253
	10	.12009967	.14738673	.17912407		10	.11143368	.13766640	.16661330
	11	.13411907	.16228009	.19557268		11	.12443250	.15168167	.18192766
	12	.14823603	.17690315	.21172261		12	.13751097	.16489784	.19714458
	13	.16246066	.19089430	.22818206		13	.15068205	.17801136	.21228851
	14	.17672629	.20502137	.24436843		14	.16392580	.19122064	.22736065
	15	.19108123	.21950076	.26067338		15	.17721651	.20454604	.24236685
	16	.20546526	.23438103	.27652309		16	.19059603	.21776273	.25731271
	17	.21989922	.24951152	.29250602		17	.20401812	.23097081	.27220271
	18	.23433668	.26462002	.30862717		18	.21745318	.24511964	.28703802
	19	.24881408	.27972501	.32492275		19	.23101816	.25841350	.30182586
	20	.26327960	.29483004	.34130500		20	.24459062	.27063068	.31556565
	21	.27767157	.31033505	.35784866		21	.25820764	.28284763	.32926054
	22	.29202637	.32564005	.37459322		22	.27186798	.29486484	.34591208
	23	.30635700	.34096505	.39150065		23	.28556908	.30728210	.36052316
	24	.32060433	.35622510	.40877300		24	.29931107	.31949934	.37509408
	25	.33477053	.37155642	.42643345		25	.31309107	.33171676	.38967652
	26	.34877867	.38685152	.44448097		26	.32680837	.34403411	.40417161
	27	.36272041	.40216706	.46294850		27	.34076230	.35701514	.41858010
	28	.37672202	.41746746	.48093309		28	.35465171	.36976803	.43300352
	29	.39077777	.43277770	.49846513		29	.36857508	.38258617	.44730173
	30	.40477508	.44800866	.51571722		30	.38253449	.39538158	.46174588
	31	.41881176	.46324804	.53106076		31	.39652672	.40821209	.47606628
	32	.43281876	.47849062	.54646302		32	.41055227	.42107877	.49035330
	33	.44684028	.49373300	.56180731		33	.42461070	.43465509	.50460752
						34	.43870180	.44867345	.51882803
						35	.45282585	.46280125	.53301776

TABLE I Contd.

41	1	25	50	75	90	1	25	50	75
1	00882841	00001020	00181414	00558855	00862691	01171704	01717940	02333169	03033060
2	01287756	00227776	00540888	01211004	02088904	02733782	03433169	04133169	04833169
3	01387756	00327776	00640888	01311004	02188904	02833782	03533169	04233169	04933169
4	01487756	00427776	00740888	01411004	02288904	02933782	03633169	04333169	05033169
5	01587756	00527776	00840888	01511004	02388904	03033782	03733169	04433169	05133169
6	01687756	00627776	00940888	01611004	02488904	03133782	03833169	04533169	05233169
7	01787756	00727776	01040888	01711004	02588904	03233782	03933169	04633169	05333169
8	01887756	00827776	01140888	01811004	02688904	03333782	04033169	04733169	05433169
9	01987756	00927776	01240888	01911004	02788904	03433782	04133169	04833169	05533169
10	02087756	01027776	01340888	02011004	02888904	03533782	04233169	04933169	05633169
11	02187756	01127776	01440888	02111004	02988904	03633782	04333169	05033169	05733169
12	02287756	01227776	01540888	02211004	03088904	03733782	04433169	05133169	05833169
13	02387756	01327776	01640888	02311004	03188904	03833782	04533169	05233169	05933169
14	02487756	01427776	01740888	02411004	03288904	03933782	04633169	05333169	06033169
15	02587756	01527776	01840888	02511004	03388904	04033782	04733169	05433169	06133169
16	02687756	01627776	01940888	02611004	03488904	04133782	04833169	05533169	06233169
17	02787756	01727776	02040888	02711004	03588904	04233782	04933169	05633169	06333169
18	02887756	01827776	02140888	02811004	03688904	04333782	05033169	05733169	06433169
19	02987756	01927776	02240888	02911004	03788904	04433782	05133169	05833169	06533169
20	03087756	02027776	02340888	03011004	03888904	04533782	05233169	05933169	06633169
21	03187756	02127776	02440888	03111004	03988904	04633782	05333169	06033169	06733169
22	03287756	02227776	02540888	03211004	04088904	04733782	05433169	06133169	06833169
23	03387756	02327776	02640888	03311004	04188904	04833782	05533169	06233169	06933169
24	03487756	02427776	02740888	03411004	04288904	04933782	05633169	06333169	07033169
25	03587756	02527776	02840888	03511004	04388904	05033782	05733169	06433169	07133169
26	03687756	02627776	02940888	03611004	04488904	05133782	05833169	06533169	07233169
27	03787756	02727776	03040888	03711004	04588904	05233782	05933169	06633169	07333169
28	03887756	02827776	03140888	03811004	04688904	05333782	06033169	06733169	07433169
29	03987756	02927776	03240888	03911004	04788904	05433782	06133169	06833169	07533169
30	04087756	03027776	03340888	04011004	04888904	05533782	06233169	06933169	07633169
31	04187756	03127776	03440888	04111004	04988904	05633782	06333169	07033169	07733169
32	04287								

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PERCENTILE POINTS OF THE BETA DISTRIBUTION

N	P	.25	.50	.75	N	P	.25	.50	.75
85	1	.00337876	.00812151	.01617707	90	1	.00319135	.00767205	.01528525
	2	.01131195	.01966667	.03136617		2	.01068326	.01857819	.02963812
	3	.02035647	.03133511	.04560976		3	.01922189	.02960070	.04300689
	4	.02991077	.04300036	.06036664		4	.02872455	.04064870	.05610747
	5	.03978182	.05674555	.07787969		5	.03755458	.05170601	.06884538
	6	.04987270	.06664547	.08607968		6	.04670808	.06276778	.08136297
	7	.05913008	.07815801	.09916753		7	.05677120	.07293203	.09373818
	8	.06751023	.08987214	.11212550		8	.06657713	.08389789	.10599174
	9	.07501170	.10158725	.12407664		9	.07644871	.09596455	.11814521
	10	.08160682	.11330323	.13773085		10	.08647835	.10709184	.13021327
	11	.08727582	.12501271	.15061837		11	.09654627	.11800900	.14220704
	12	.09201510	.13573667	.16233027		12	.10667038	.12916819	.15413812
	13	.09581620	.14536557	.17253115		13	.11637051	.14023671	.16501357
	14	.09874760	.15417068	.18007593		14	.12511300	.15112553	.17583113
	15	.10082842	.16210842	.18551593		15	.13296657	.16237463	.18660667
	16	.10202106	.16920608	.19001220		16	.14044357	.17244357	.19613450
	17	.10332374	.17530382	.19357150		17	.14751130	.18151265	.20402450
	18	.10472465	.18040174	.19625551		18	.15407229	.18958208	.21087722
	19	.10621123	.18455071	.19816154		19	.15972229	.19665145	.21620526
	20	.10776341	.18774774	.19931000		20	.16451866	.20277200	.22088050
	21	.10937062	.19008883	.20074106		21	.16845200	.20790462	.22493684
	22	.11102362	.19158116	.20234869		22	.17150027	.21205005	.22840001
	23	.11271527	.19221216	.20398308		23	.17370703	.21502034	.23124503
	24	.11443924	.19297019	.20554694		24	.17508560	.21706882	.23357224
	25	.11619806	.19374818	.20703512		25	.17558564	.21806882	.23537276
	26	.11798501	.19454001	.20845241		26	.17529305	.21813851	.23670276
	27	.11979405	.19534066	.20979194		27	.17450017	.21727795	.23756350
	28	.12162719	.19614500	.21105700		28	.17299071	.21557795	.23794894
	29	.12348716	.19695216	.21225270		29	.17060066	.21304781	.23784454
	30	.12536717	.19776224	.21338563		30	.16731959	.20974875	.23725539
	31	.12726224	.19857437	.21446282		31	.16349608	.20585705	.23628109
	32	.12917537	.19938871	.21549067		32	.15915700	.20155705	.23496114
	33	.13110768	.20020623	.21647553		33	.15452700	.19696114	.23330041
	34	.13306028	.20102700	.21741400		34	.14978667	.19217667	.23138050
	35	.13503327	.20185103	.21830288		35	.14494316	.18728316	.22920124
	36	.13702677	.20267828	.21914768		36	.13999619	.18228316	.22686174
	37	.13904076	.20350960	.22005312		37	.13494064	.17714608	.22437464
	38	.14107523	.20434497	.22092300		38	.12978064	.17187611	.22174744
	39	.14313021	.20518440	.22175245		39	.12452506	.16648488	.21901354
	40	.14520571	.20602783	.22254660		40	.11917795	.16101574	.21618615
	41	.14730176	.20687526	.22330060		41	.11373118	.15551850	.21325872
	42	.14941839	.20772669	.22401962		42	.10818546	.15000632	.21023232
	43	.15155565	.20858214	.22470000		43	.10254684	.14448482	.20710686
	44	.15371369	.20944161	.22534671		44	.09681821	.13894907	.20388386
	45	.15589250	.21030509	.22595461		45	.09099021	.13339507	.20056730

PERCENTILE POINTS OF THE BETA DISTRIBUTION

N	I	.25	.50	.75	N	I	.25	.50	.75
95	1	.0002344	.00726973	.01468652	100	1	.00297257	.0650745	.01376730
	2	.01012086	.01760384	.02800211		2	.00651473	.01672657	.02665040
	3	.01827087	.02800437	.04085165		3	.01729698	.02665068	.03882875
	4	.02676424	.03851684	.05318749		4	.02541330	.03659748	.05055637
	5	.03555797	.04899424	.06525635		5	.03379682	.04655274	.06203106
	6	.04466005	.05947584	.07717620		6	.04236109	.05651202	.07332684
	7	.05376813	.06995932	.08887242		7	.05106668	.06647353	.08448677
	8	.06284322	.08044522	.10049416		8	.05988218	.07633441	.09553853
	9	.07243372	.09073155	.11202148		9	.06877854	.08640017	.10650116
	10	.08189381	.10141853	.12326888		10	.07777108	.09636454	.11758840
	11	.09142665	.11190601	.13486724		11	.08681948	.10632933	.12821059
	12	.10101661	.12230372	.14616464		12	.09592392	.11629651	.13897571
	13	.11066286	.13280100	.15742822		13	.10508176	.12626000	.14960030
	14	.12036585	.14336970	.16864390		14	.11428852	.13622550	.16038638
	15	.13009782	.15398570	.17981510		15	.12352801	.14619124	.17098624
	16	.13983782	.16436704	.19096537		16	.13281160	.15615711	.18157570
	17	.14965647	.17483570	.20206515		17	.14212887	.16612300	.19213022
	18	.15954790	.18537644	.21308810		18	.15147909	.17608915	.20265234
	19	.16942281	.19581327	.22412677		19	.16085070	.18605540	.21314421
	20	.17928620	.20636215	.23517333		20	.17024508	.19602147	.22360773
	21	.18920218	.21673112	.24608749		21	.17970418	.20598730	.23406308
	22	.19926367	.22727995	.25696765		22	.18916521	.21595407	.24446521
	23	.20946084	.23776911	.26780203		23	.19865020	.22592032	.25484317
	24	.21978273	.24826788	.27883179		24	.20815876	.23588668	.26520834
	25	.22932918	.25874724	.28960800		25	.21768811	.24585306	.27555086
	26	.23900628	.26924624	.30041613		26	.22723803	.25581947	.28587315
	27	.24880817	.27977552	.31126344		27	.23680201	.26578501	.29617408
	28	.25880689	.29031480	.32216394		28	.24640029	.27575236	.30645724
	29	.26907282	.30070386	.33266481		29	.25600942	.28571883	.31672058
	30	.27950720	.31110206	.34330574		30	.26563657	.29568532	.32696674
	31	.29004027	.32168227	.35444747		31	.27528130	.30565157	.33719476
	32	.30071740	.33217140	.36517059		32	.28494357	.31561833	.34740560
	33	.31064510	.34266072	.37597551		33	.29452227	.32558466	.35759007
	34	.32066983	.35314097	.38685263		34	.30431705	.33555130	.36777807
	35	.33081155	.36363922	.39773248		35	.31427280	.34551759	.37795019
	36	.34111714	.37412849	.40885211		36	.32437526	.35548435	.38808683
	37	.35144770	.38461700	.41985210		37	.33462991	.36545060	.39821823
	38	.36174046	.39510711	.43074603		38	.34512524	.37541745	.40833472
	39	.37220808	.40559631	.44164392		39	.35580745	.38538422	.41843679
	40	.38277133	.41608560	.45253112		40	.36670936	.39535076	.42852762
	41	.39342765	.42657489	.46340261		41	.37760961	.40531716	.43859655
	42	.40406997	.43706431	.47415785		42	.38842374	.41528393	.44865536
	43	.41461196	.44755348	.48480921		43	.39925201	.42525052	.45866958
	44	.42518291	.45804248	.49542287		44	.40999397	.43521711	.46873123
	45	.43572184	.46853209	.50603217		45	.42119490	.44518338	.47873854
	46	.44646983	.47902142	.51652612		46	.43181904	.45515030	.48875224
	47	.45508373	.48051069	.52600693		47	.44170192	.46511690	.49876169
	48	.46553143	.49000000	.53646857		48	.45159816	.47508350	.50877191
						49	.46150804	.48504905	.51868224
						50	.46123110	.49501670	.52864228

PERCENTILE POINTS OF THE NORMAL ORDER STATISTICS

N	1	.01	.025	.05	.10	.25	.50	.75	.90	.95	.975	.99
2	1	-2.5750	-2.2390	-1.9545	-1.6322	-1.1078	-.5450	-.0000	.4783	.7601	1.0022	1.2816
3	1	-2.7119	-2.3909	-2.1212	-1.8183	-1.3319	-.8193	-.3317	.0900	.3361	.5464	.7877
3	2	-1.5640	-1.3147	-1.1015	-.8567	-.4500	.0000	.4500	.8567	1.1015	1.3147	1.5640
4	1	-2.8058	-2.4943	-2.2240	-1.9432	-1.4803	-.9981	-.5450	-.1569	.0681	.2595	.4783
4	2	-1.7279	-1.4940	-1.2953	-1.0689	-.6966	-.2905	.1097	.4664	.6789	.8628	1.0764
5	1	-2.8769	-2.5723	-2.3187	-2.0365	-1.5900	-1.1290	-.6994	-.3344	-.0547	.2582	.4783
5	2	-1.8428	-1.6188	-1.4294	-1.2147	-.8641	-.4851	-.1151	.2110	.4054	.5722	.7657
5	3	-1.2591	-1.0510	-.8805	-.6851	-.3600	.0000	.3600	.6851	.8806	1.0510	1.2591
6	1	-2.9339	-2.6347	-2.3862	-2.1105	-1.6765	-1.2313	-.8193	-.4713	-.2714	-.1023	.0900
6	2	-1.9306	-1.7139	-1.5313	-1.3249	-.9897	-.6297	-.2807	.0259	.3618	.5408	.7182
6	3	-1.3739	-1.1845	-1.0230	-.8384	-.5333	-.1983	.1337	.4311	.6088	.7628	.9421
7	1	-2.9814	-2.6865	-2.4421	-2.1717	-1.7476	-1.3149	-.9166	-.5819	-.3003	-.2285	-.0450
7	2	-2.0016	-1.7904	-1.6130	-1.4130	-1.0895	-.7438	-.4105	-.1192	.0736	.1986	.3675
7	3	-1.4698	-1.2873	-1.1323	-.9556	-.6648	-.3475	-.0449	.2435	.4090	.5522	.7182
7	4	-1.0702	-.9000	-.7543	-.5870	-.3085	.0000	.3085	.5870	.7543	.9000	1.0702
8	1	-3.0220	-2.7307	-2.4898	-2.2337	-1.8078	-1.3852	-.9981	-.6742	-.4892	-.3334	-.1569
8	2	-2.0609	-1.8542	-1.6809	-1.4861	-1.1718	-.8376	-.4567	-.2312	.0736	.1986	.3675
8	3	-1.5478	-1.3707	-1.2206	-1.0500	-.7707	-.4662	-.1682	.0939	.2525	.3876	.5440
8	4	-1.1173	-0.9068	-.7672	-.6074	-.4424	-.1506	.1395	.3999	.5556	.6907	.8481
9	1	-3.0574	-2.7693	-2.5312	-2.2689	-1.8598	-1.4457	-.1.0680	-.7530	-.5736	-.4227	-.2520
9	2	-2.1117	-1.9088	-1.7389	-1.5484	-1.2418	-.9168	-.6060	-.3362	-.1786	-.0439	.1106
9	3	-1.6132	-1.4406	-1.2945	-1.1288	-.8578	-.5444	-.2779	.0249	.1248	.2536	.4024
9	4	-1.2321	-1.0939	-.9591	-.8050	-.5505	-.2713	.0050	.2518	.3900	.5264	.6744
9	5	-.9504	-.7995	-.6702	-.5216	-.2742	.0000	.2742	.5216	.6702	.7995	.9504
10	1	-3.0889	-2.8034	-2.5679	-2.3087	-1.9055	-1.4955	-.1.1290	-.8215	-.6468	-.5001	-.3344
10	2	-2.1561	-1.9564	-1.7854	-1.6024	-1.3073	-.9852	-.6828	-.4211	-.2685	-.1383	.0109
10	3	-1.6695	-1.5005	-1.3578	-1.1961	-.9324	-.6477	-.3707	.0173	.1411	.2839	.4336
10	4	-1.3212	-1.1673	-.9869	-.8069	-.6407	-.3716	-.1062	.1300	.2705	.3920	.5327
10	5	-1.0343	-.8887	-.7640	-.6209	-.4835	-.1214	.1396	.3740	.5143	.6360	.7778
11	1	-3.1171	-2.8339	-2.6007	-2.3443	-1.9462	-1.5459	-.1.1830	-.8821	-.7114	-.5683	-.4068
11	2	-2.1955	-1.9985	-1.8341	-1.6502	-1.3556	-.1.0452	-.7500	-.4952	-.2468	-.2204	-.0757
11	3	-1.7188	-1.5529	-1.4131	-1.2548	-.9927	-.7199	-.4507	.0213	.1621	.2785	.4136
11	4	-1.3809	-1.2305	-1.1027	-.9572	-.7170	-.4571	-.2007	.2520	.3858	.5018	.6366
11	5	-1.1059	-.9641	-.8431	-.7046	-.4741	-.2227	.0278	.4761	.6090	.7264	.8633
11	6	-.8633	-.7264	-.6090	-.4741	-.2493	.0000	.2493	.4761	.6090	.7264	.8633
12	1	-3.1427	-2.8616	-2.6303	-2.3764	-1.9829	-1.5882	-.1.2313	-.9362	-.7691	-.6291	-.4713

PERCENTILE POINTS OF THE NORMAL ORDER STATISTICS

N	1	.01	.025	.05	.10	.25	.50	.75	.90	.95	.975	.99
12	2	-2.27308	-2.0362	-1.8741	-1.6929	-1.4931	-1.0986	-.8096	-.5607	-.4161	-.2929	-.1521
3	4	-1.76226	-1.5094	-1.3620	-1.23067	-1.0544	-.7834	-.5210	-.2910	-.1558	-.0937	.0937
4	5	-1.4332	-1.2859	-1.1609	-1.0186	-.7852	-.5314	-.2825	-.0620	.0686	.1811	.3112
5	6	-1.1677	-1.0294	-.9115	-.7767	-.5548	-.3093	-.0675	.1484	.2771	.3884	.5175
6	7	-.9361	-.8031	-.6894	-.5587	-.3416	-.1017	.1374	.3524	.4811	.5928	.7228
13	1	-3.1660	-2.8869	-2.6574	-2.4057	-2.0163	-1.5765	-1.2750	-.9850	-.8210	-.6838	-.5293
2	3	-2.2628	-2.0704	-1.9102	-1.7314	-1.4460	-1.1464	-.8631	-.6192	-.4780	-.3577	-.2203
3	4	-1.8020	-1.6412	-1.5059	-1.3632	-1.1655	-.8700	-.5835	-.3491	-.2273	-.1144	.0155
4	5	-1.4799	-1.3351	-1.2125	-1.0731	-.8447	-.5669	-.3545	-.1402	-.0134	.0957	.2218
5	6	-1.2222	-1.0867	-.9715	-.8398	-.6226	-.3649	-.1502	.0588	.1830	.2904	.4149
6	7	-.9993	-.8597	-.7580	-.6319	-.4212	-.1889	.0419	.2488	.3724	.4795	.6041
7	8	-.7965	-.6703	-.5620	-.4375	-.2701	.0000	.2301	.4375	.5620	.6703	.7965
14	1	-3.1874	-2.9101	-2.6822	-2.4325	-2.0468	-1.6015	-1.3349	-1.0294	-.8662	-.7335	-.5819
2	3	-2.2927	-2.1016	-1.9431	-1.7655	-1.4849	-1.1800	-.9114	-.6724	-.5138	-.4161	-.2817
3	4	-1.8377	-1.6790	-1.5456	-1.4052	-1.1516	-.8510	-.6066	-.4201	-.2914	-.1811	-.0545
4	5	-1.5218	-1.3794	-1.2588	-1.1220	-.8880	-.6555	-.4386	-.2596	-.0862	.0200	.1425
5	6	-1.2706	-1.1378	-1.0243	-.8960	-.6836	-.4517	-.2322	-.0201	.1004	.2045	.3251
6	7	-1.0551	-.9284	-.8271	-.6962	-.4809	-.2652	-.0513	.1589	.2782	.3816	.5016
7	8	-.8606	-.7377	-.6323	-.5113	-.3101	-.0875	.1345	.3342	.4537	.5575	.6783
15	1	-3.2073	-2.9316	-2.7051	-2.4573	-2.0769	-1.6317	-1.3314	-1.0700	-.9114	-.7789	-.6300
2	3	-2.3189	-2.1302	-1.9746	-1.7987	-1.5205	-1.2297	-.9558	-.7206	-.5846	-.4691	-.3374
3	4	-1.8703	-1.7135	-1.5818	-1.4436	-1.1935	-.9372	-.6805	-.4720	-.3493	-.2415	-.1177
4	5	-1.5599	-1.4195	-1.3003	-1.1662	-.9662	-.7093	-.4764	-.2720	-.1515	-.0679	.0715
5	6	-1.3144	-1.1838	-1.0729	-.9464	-.7484	-.5114	-.2884	-.0904	.0270	.1282	.2453
6	7	-1.1050	-.9807	-.8747	-.7534	-.5529	-.3327	-.1149	.0796	.1954	.2955	.4117
7	8	-.9174	-.7972	-.6944	-.5764	-.3804	-.1641	.0511	.2442	.3595	.4597	.5651
8	9	-.7470	-.6254	-.5244	-.4083	-.2147	.0000	.2147	.4083	.5244	.6254	.7470
16	1	-3.2259	-2.9515	-2.7265	-2.4803	-2.1010	-1.7235	-1.3852	-1.1074	-.9512	-.8207	-.6742
2	3	-2.3438	-2.1567	-2.0013	-1.8283	-1.5533	-1.2663	-.9961	-.7649	-.6312	-.5177	-.3885
3	4	-1.9003	-1.7352	-1.6151	-1.4636	-1.2319	-.9795	-.7369	-.5257	-.4020	-.2954	-.1751
4	5	-1.5948	-1.4562	-1.3392	-1.2066	-.9900	-.7563	-.5288	-.3286	-.2107	-.1094	.0074
5	6	-1.3542	-1.2256	-1.1165	-.9922	-.7879	-.5654	-.3471	-.1577	-.0391	.0596	.1738
6	7	-1.1450	-1.0280	-.9239	-.8050	-.6086	-.3933	-.1807	.0088	.1215	.2189	.3317
7	8	-.9683	-.8505	-.7498	-.6344	-.4304	-.2321	-.0227	.1630	.2767	.3736	.4862
8	9	-.8005	-.6855	-.5830	-.4738	-.2853	-.0768	.1313	.3185	.4306	.5279	.6412
17	1	-3.2437	-2.9702	-2.7454	-2.5018	-2.1253	-1.7512	-1.4165	-1.1423	-.9880	-.8594	-.7150
2	3	-2.3670	-2.1813	-2.0273	-1.8559	-1.5837	-1.3001	-.9935	-.7641	-.6312	-.5177	-.3885
3	4	-1.9281	-1.7466	-1.6458	-1.5011	-1.2674	-.9815	-.7796	-.5719	-.4505	-.3467	-.2277
4	5	-1.6269	-1.4700	-1.3745	-1.2436	-.9902	-.7602	-.5767	-.3803	-.2646	-.1654	.0311
5	6	-1.3906	-1.2639	-1.1562	-.9940	-.8231	-.6146	-.4006	-.2111	-.0991	.0025	.1090
6	7	-1.1914	-1.0729	-.9686	-.8518	-.6590	-.4481	-.2401	-.0550	.0550	.1499	.2590
7	8	-.9683	-.8505	-.7498	-.6344	-.4304	-.2321	-.0227	.1630	.2767	.3736	.4862
8	9	-.8005	-.6855	-.5830	-.4738	-.2853	-.0768	.1313	.3185	.4306	.5279	.6412
18	1	-3.2637	-2.9907	-2.7659	-2.5223	-2.1458	-1.7717	-1.4370	-1.1627	-.9980	-.8694	-.7250
2	3	-2.3869	-2.2012	-2.0473	-1.8759	-1.6037	-1.3201	-.9935	-.7641	-.6312	-.5177	-.3885
3	4	-1.9491	-1.7676	-1.6668	-1.5221	-1.2684	-.9825	-.7806	-.5729	-.4515	-.3477	-.2287
4	5	-1.6479	-1.4910	-1.3902	-1.2593	-.9960	-.7660	-.5825	-.3841	-.2684	-.1692	.0351
5	6	-1.4066	-1.2881	-1.1873	-.9994	-.8285	-.6190	-.4050	-.2155	-.1035	.0029	.1100
6	7	-1.2074	-1.0889	-.9891	-.8712	-.6783	-.4688	-.2548	-.0643	.0543	.1497	.2590
7	8	-.9891	-.8706	-.7718	-.6539	-.4610	-.2515	-.0375	.1670	.2807	.3761	.4862
8	9	-.8112	-.6927	-.5939	-.4850	-.2921	-.0826	.1321	.3193	.4314	.5287	.6412

PERCENTILE POINTS OF THE NORMAL ORDER STATISTICS

N	1	.01	.025	.05	.10	.25	.50	.75	.90	.95	.975	.99
17	9	-.6991	-.5884	-.4935	-.3843	-.2021	.0000	.2021	.3843	.4935	.5884	.6991
18	1	-.32594	-.29877	-.27651	-.25219	-.21480	-.17771	-.14457	-.11746	-.10223	-.08953	-.07530
	2	-.25886	-.22043	-.20515	-.18816	-.15120	-.11315	-.06827	-.04335	-.03138	-.02039	-.01047
	3	-.19539	-.16018	-.14674	-.13312	-.10022	-.05466	-.01911	-.00416	-.00212	-.00112	-.00047
	4	-.16566	-.13213	-.11971	-.10779	-.07674	-.04088	-.01597	-.00428	-.00212	-.00112	-.00047
	5	-.14263	-.11091	-.09896	-.08724	-.05746	-.02653	-.01091	-.00428	-.00212	-.00112	-.00047
	6	-.12727	-.09624	-.08454	-.07343	-.04505	-.01884	-.00800	-.00428	-.00212	-.00112	-.00047
	7	-.11562	-.08524	-.07454	-.06433	-.03855	-.01684	-.00921	-.00543	-.00327	-.00191	-.00104
	8	-.10687	-.07782	-.06786	-.05852	-.03511	-.01706	-.00964	-.00627	-.00410	-.00253	-.00147
	9	-.10011	-.07228	-.06286	-.05411	-.03263	-.01706	-.01021	-.00743	-.00527	-.00340	-.00212
19	1	-.32747	-.29042	-.27826	-.25408	-.21304	-.18013	-.14731	-.12048	-.10543	-.09289	-.07884
	2	-.26089	-.22258	-.20741	-.19046	-.15385	-.11509	-.06957	-.04435	-.03138	-.02039	-.01047
	3	-.19781	-.16273	-.14701	-.13308	-.10018	-.05466	-.01911	-.00416	-.00212	-.00112	-.00047
	4	-.16843	-.13504	-.12270	-.10980	-.07674	-.04088	-.01597	-.00428	-.00212	-.00112	-.00047
	5	-.14554	-.11318	-.10071	-.08879	-.05746	-.02653	-.01091	-.00428	-.00212	-.00112	-.00047
	6	-.12765	-.09624	-.08454	-.07343	-.04505	-.01884	-.00921	-.00543	-.00327	-.00191	-.00104
	7	-.11097	-.08027	-.06957	-.05933	-.03511	-.01706	-.00964	-.00627	-.00410	-.00253	-.00147
	8	-.10413	-.07526	-.06520	-.05633	-.03263	-.01706	-.01021	-.00743	-.00527	-.00340	-.00212
	9	-.10011	-.07228	-.06286	-.05411	-.03263	-.01706	-.01021	-.00743	-.00527	-.00340	-.00212
	10	-.09521	-.06874	-.05974	-.05144	-.03014	-.01706	-.01021	-.00743	-.00527	-.00340	-.00212
20	1	-.32893	-.29197	-.27992	-.25586	-.21480	-.18242	-.14988	-.12332	-.10843	-.09604	-.08215
	2	-.26420	-.22611	-.21095	-.19287	-.15633	-.11784	-.07100	-.04511	-.03138	-.02039	-.01047
	3	-.20007	-.16512	-.14926	-.13394	-.10022	-.05466	-.01911	-.00416	-.00212	-.00112	-.00047
	4	-.17102	-.13776	-.12558	-.11140	-.07674	-.04088	-.01597	-.00428	-.00212	-.00112	-.00047
	5	-.14844	-.11622	-.10404	-.09066	-.05746	-.02653	-.01091	-.00428	-.00212	-.00112	-.00047
	6	-.12937	-.09803	-.08623	-.07343	-.04505	-.01884	-.00921	-.00543	-.00327	-.00191	-.00104
	7	-.11303	-.08213	-.07071	-.05879	-.03511	-.01706	-.00964	-.00627	-.00410	-.00253	-.00147
	8	-.10605	-.07694	-.06698	-.05746	-.03263	-.01706	-.01021	-.00743	-.00527	-.00340	-.00212
	9	-.10214	-.07369	-.06417	-.05548	-.03263	-.01706	-.01021	-.00743	-.00527	-.00340	-.00212
	10	-.09797	-.07097	-.06218	-.05388	-.03014	-.01706	-.01021	-.00743	-.00527	-.00340	-.00212
21	1	-.33029	-.29345	-.28149	-.25755	-.21651	-.18457	-.15203	-.12599	-.11126	-.09900	-.08527
	2	-.26660	-.22852	-.21336	-.19538	-.15884	-.11989	-.07305	-.04716	-.03243	-.02039	-.01047
	3	-.20220	-.16725	-.15109	-.13581	-.10210	-.05654	-.02100	-.00605	-.00401	-.00212	-.00104
	4	-.17345	-.14040	-.12822	-.11404	-.07938	-.04352	-.01861	-.00605	-.00401	-.00212	-.00104
	5	-.15116	-.11906	-.10688	-.09270	-.05950	-.02757	-.01191	-.00605	-.00401	-.00212	-.00104
	6	-.13257	-.10147	-.08929	-.07511	-.04191	-.01861	-.00921	-.00605	-.00401	-.00212	-.00104
	7	-.11633	-.08543	-.07325	-.05907	-.02587	-.01250	-.00800	-.00543	-.00327	-.00191	-.00104
	8	-.10967	-.07877	-.06659	-.05243	-.01923	-.01250	-.00800	-.00543	-.00327	-.00191	-.00104
	9	-.10581	-.07591	-.06373	-.04957	-.01637	-.01250	-.00800	-.00543	-.00327	-.00191	-.00104
	10	-.10195	-.07305	-.06087	-.04671	-.01317	-.01250	-.00800	-.00543	-.00327	-.00191	-.00104
	11	-.09809	-.07019	-.05801	-.04385	-.01457	-.01250	-.00800	-.00543	-.00327	-.00191	-.00104
22	1	-.33159	-.29475	-.28279	-.25885	-.21781	-.18587	-.15333	-.12851	-.11376	-.10179	-.08821
	2	-.26791	-.22983	-.21467	-.19669	-.16015	-.12121	-.07437	-.04848	-.03373	-.02176	-.01179

PERCENTILE POINTS OF THE NORMAL ORDER STATISTICS

N	1	.01	.025	.05	.1	.25	.50	.75	.90	.95	.975	.99
22	3	-2.0422	-1.8949	-1.7717	-1.6336	-1.4115	-1.1765	-.9521	-.7580	-.6450	-.5487	-.4385
	4	-1.7573	-1.6270	-1.5173	-1.3944	-1.1924	-.9766	-.7682	-.5860	-.4792	-.3877	-.2826
	5	-1.5371	-1.4172	-1.3159	-1.2009	-1.0128	-.8095	-.6114	-.4370	-.3343	-.2460	-.1443
	6	-1.3538	-1.2411	-1.1453	-1.0363	-.9473	-.8624	-.7825	-.7174	-.6524	-.5956	-.5335
	7	-1.1942	-1.0864	-.9947	-.9000	-.8173	-.7425	-.6725	-.6171	-.5618	-.5124	-.4619
	8	-1.0504	-.9464	-.8576	-.7560	-.6589	-.5634	-.4729	-.3881	-.3088	-.2364	-.1629
	9	-.9179	-.8165	-.7299	-.6306	-.5368	-.4483	-.3641	-.2851	-.2122	-.1450	-.0759
	10	-.7933	-.6939	-.6088	-.5111	-.4186	-.3321	-.2507	-.1751	-.1059	-.0430	-.0259
	11	-.6742	-.5763	-.4923	-.4056	-.3246	-.2491	-.1791	-.1151	-.0575	-.0061	-.0000
23	1	-3.3284	-3.0618	-2.8440	-2.6067	-2.2436	-1.8854	-1.5675	-1.3090	-1.1644	-1.0342	-.9098
	2	-2.4793	-2.3005	-2.1526	-1.9887	-1.7298	-1.4617	-1.2116	-.9992	-.8771	-.7739	-.6567
	3	-2.0612	-1.9149	-1.7926	-1.6556	-1.4354	-1.2025	-.9885	-.7882	-.6769	-.5817	-.4740
	4	-1.7789	-1.6496	-1.5409	-1.4181	-1.2789	-1.0954	-.8994	-.7194	-.5740	-.4537	-.3201
	5	-1.5511	-1.4423	-1.3419	-1.2281	-1.0421	-.8411	-.6555	-.4734	-.3720	-.2850	-.1848
	6	-1.3803	-1.2786	-1.1793	-1.0661	-.8892	-.6948	-.5084	-.3418	-.2433	-.1585	-.0607
	7	-1.2230	-1.1165	-1.0259	-.9224	-.7519	-.5657	-.3824	-.2197	-.1232	-.0400	-.0562
	8	-1.0819	-.9791	-.8815	-.7912	-.6255	-.4437	-.2641	-.1041	-.0089	-.0732	-.1684
	9	-.9521	-.8521	-.7667	-.6688	-.5065	-.3280	-.1509	-.0073	-.1016	-.1831	-.2778
	10	-.8304	-.7326	-.6488	-.5526	-.3928	-.2165	-.0411	-.1161	-.2100	-.2913	-.3857
	11	-.7146	-.6183	-.5357	-.4407	-.2826	-.1076	-.0669	-.2238	-.3176	-.3990	-.4937
	12	-.6029	-.5076	-.4257	-.3315	-.1744	-.0000	-.1744	-.3315	-.4257	-.5076	-.6029
24	1	-3.3462	-3.0745	-2.8575	-2.6213	-2.2500	-1.9038	-1.5882	-1.3317	-1.1884	-1.0693	-.9362
	2	-2.4947	-2.3168	-2.1698	-1.9959	-1.7496	-1.4836	-1.2355	-1.0253	-.9044	-.8023	-.6864
	3	-2.0793	-1.9340	-1.8125	-1.6765	-1.4581	-1.2272	-1.0073	-.8174	-.7069	-.6129	-.5054
	4	-1.7994	-1.6711	-1.5632	-1.4414	-1.2440	-1.0327	-.8288	-.6510	-.5468	-.4576	-.3553
	5	-1.5838	-1.4660	-1.3665	-1.2537	-1.0596	-.8708	-.6775	-.5076	-.4075	-.3217	-.2229
	6	-1.4052	-1.2946	-1.2008	-1.0841	-.8991	-.7290	-.5630	-.4198	-.2816	-.1980	-.1016
	7	-1.2502	-1.1448	-1.0551	-.9428	-.7844	-.6006	-.4498	-.2595	-.1644	-.0825	-.0122
	8	-1.1114	-1.0098	-.9232	-.8242	-.6606	-.4814	-.3044	-.1469	-.0533	-.0274	-.1210
	9	-.9840	-.8853	-.8010	-.7044	-.5445	-.3686	-.2044	-.0389	-.0533	-.1338	-.2266
	10	-.8650	-.7685	-.6859	-.5911	-.4338	-.2604	-.0880	-.0663	-.1583	-.2380	-.3305
	11	-.7521	-.6572	-.5759	-.4824	-.3270	-.1551	-.0161	-.1698	-.2617	-.3413	-.4339
	12	-.6435	-.5498	-.4693	-.3768	-.2225	-.0515	-.1193	-.2729	-.3650	-.4439	-.5379
25	1	-3.3515	-3.0866	-2.8704	-2.6351	-2.2754	-1.9213	-1.6078	-1.3532	-1.2111	-1.0931	-.9612
	2	-2.5054	-2.3321	-2.1861	-1.9941	-1.7685	-1.5045	-1.2506	-.9900	-.9303	-.8291	-.7144
	3	-2.0966	-1.9571	-1.8314	-1.6963	-1.4795	-1.2506	-1.0327	-.8447	-.7354	-.6424	-.5361
	4	-1.8188	-1.6914	-1.5843	-1.4635	-1.2678	-1.0585	-.8567	-.6807	-.5777	-.4897	-.3886
	5	-1.6053	-1.4885	-1.3898	-1.2780	-1.0957	-.8989	-.7077	-.5398	-.4410	-.3562	-.2587
	6	-1.4287	-1.3191	-1.2262	-1.1206	-.9474	-.7595	-.5757	-.4134	-.3176	-.2352	-.1401
	7	-1.2758	-1.1714	-1.0877	-.9815	-.8150	-.6334	-.4550	-.2968	-.2031	-.1234	-.0291
	8	-1.1391	-1.0386	-.9540	-.8551	-.6936	-.5167	-.3422	-.1870	-.0949	-.0153	-.0767
	9	-.9974	-.8964	-.8132	-.7178	-.5600	-.4066	-.2530	-.0920	-.0091	-.0878	-.1794
	10	-.8794	-.7871	-.7006	-.6211	-.4721	-.3012	-.1317	-.0199	-.1103	-.1886	-.2788
	11	-.7870	-.6934	-.6133	-.5212	-.3682	-.2091	-.0309	-.1199	-.2100	-.2881	-.3788
	12	-.6812	-.5889	-.5097	-.4187	-.2670	-.0991	-.0684	-.2190	-.3091	-.3873	-.4782

PERCENTILE POINTS OF THE NORMAL ORDER STATISTICS

N	1	.01	.025	.05	.10	.25	.50	.75	.90	.95	.975	.99
25	13	-3.5787	-3.4872	-2.8828	-2.6484	-2.2907	-1.9381	-1.6265	-1.3738	-1.2323	-1.1157	.5787
26	1	-3.3624	-3.0083	-2.8828	-2.6484	-2.2907	-1.9381	-1.6265	-1.3738	-1.2323	-1.1157	.5787
	2	-2.5235	-2.3473	-2.2017	-2.0406	-1.7866	-1.5243	-1.2802	-1.0735	-.9343	-.8547	-.9850
	3	-2.1120	-1.9693	-1.8494	-1.7152	-1.5000	-1.2729	-1.0569	-.8707	-.7623	-.6704	-.5653
	4	-1.8373	-1.7108	-1.6044	-1.5045	-1.3904	-1.0829	-.8831	-.7090	-.6071	-.5200	-.4201
	5	-1.6257	-1.5098	-1.4119	-1.3011	-1.1703	-.9255	-.7453	-.5703	-.4726	-.3889	-.2926
	6	-1.4510	-1.3424	-1.2503	-1.1556	-.9742	-.7882	-.6065	-.4462	-.3515	-.2702	-.1764
	7	-1.3000	-1.1966	-1.1087	-1.0286	-.8438	-.6643	-.4881	-.3319	-.2395	-.1599	-.0680
	8	-1.1653	-1.0658	-.9811	-.8943	-.7746	-.6099	-.4477	-.2924	-.1938	-.0951	.0051
	9	-1.0422	-.9457	-.8634	-.7792	-.6533	-.4922	-.3325	-.1823	-.0826	.0149	.1346
	10	-.9277	-.8336	-.7531	-.6698	-.5579	-.4395	-.3175	-.1723	-.0856	.1425	.2317
	11	-.8197	-.7273	-.6482	-.5674	-.4666	-.3402	-.2147	-.0735	.1620	.2386	.3276
	12	-.7164	-.6253	-.5473	-.4675	-.3682	-.2402	-.1132	.0791	.2574	.3340	.4231
	13	-.6166	-.5265	-.4492	-.3693	-.2710	-.1475	.0166	.2644	.3529	.4297	.5191
27	1	-3.3728	-3.1005	-2.8947	-2.6611	-2.3005	-1.9541	-1.6444	-1.3934	-1.2535	-1.1373	-1.0077
	2	-2.5369	-2.3615	-2.2167	-2.0564	-1.8038	-1.5432	-1.3009	-1.0959	-.8783	-.7900	-.7665
	3	-2.1287	-1.9858	-1.8666	-1.7332	-1.5195	-1.2941	-1.0792	-.8953	-.7882	-.6970	-.5930
	4	-1.8549	-1.7202	-1.6226	-1.5046	-1.3199	-1.1662	-.9082	-.7358	-.6349	-.5488	-.4500
	5	-1.6451	-1.5301	-1.4330	-1.3230	-1.1418	-.9408	-.7634	-.5992	-.5026	-.4198	-.3246
	6	-1.4722	-1.3644	-1.2731	-1.1694	-.9995	-.8154	-.6356	-.4771	-.3836	-.3033	-.2177
	7	-1.3229	-1.2205	-1.1334	-1.0342	-.8711	-.6945	-.5193	-.3651	-.2739	-.1953	-.1036
	8	-1.1900	-1.0915	-1.0076	-.9118	-.7539	-.5812	-.4112	-.2601	-.1705	-.0933	-.0039
	9	-1.0688	-.9734	-.8919	-.7987	-.6447	-.4758	-.3088	-.1602	-.0718	.0045	.0929
	10	-.9563	-.8632	-.7837	-.6925	-.5415	-.3754	-.2108	-.0638	.0238	.0994	.1872
	11	-.8504	-.7591	-.6810	-.5914	-.4426	-.2786	-.1157	.0307	.1172	.1925	.2799
	12	-.7493	-.6502	-.5825	-.4941	-.3470	-.1844	-.0226	.1226	.2094	.2846	.3719
	13	-.6519	-.5531	-.4870	-.3994	-.2535	-.0918	.0695	.2145	.3012	.3765	.4641
	14	-.5571	-.4691	-.3935	-.3065	-.1612	.0000	.1612	.3065	.3935	.4691	.5571
28	1	-3.3828	-3.1202	-2.9060	-2.6733	-2.3181	-1.9694	-1.6615	-1.4122	-1.2732	-1.1580	-1.0294
	2	-2.5499	-2.3752	-2.2310	-2.0715	-1.8203	-1.5614	-1.3202	-1.1173	-.9005	-.8022	-.7507
	3	-2.1427	-2.0016	-1.8830	-1.7505	-1.5325	-1.3144	-1.1018	-.9187	-.7824	-.6924	-.6193
	4	-1.8718	-1.7468	-1.6419	-1.5237	-1.3325	-1.1284	-.9321	-.7613	-.6614	-.5761	-.4784
	5	-1.6637	-1.5494	-1.4530	-1.3439	-1.1651	-.9748	-.7892	-.6266	-.5311	-.4492	-.3551
	6	-1.4924	-1.3854	-1.2949	-1.1920	-1.0236	-.8413	-.6633	-.5065	-.4141	-.3347	-.2432
	7	-1.3448	-1.2431	-1.1568	-1.0586	-.8970	-.7213	-.5490	-.3935	-.3063	-.2288	-.1392
	8	-1.2135	-1.1150	-1.0280	-.9280	-.7816	-.6108	-.4428	-.2936	-.2051	-.1289	-.0408
	9	-.1094	-.0095	-.0810	-.0267	-.0744	-.0574	-.0426	-.0198	-.0107	-.0334	.0537
	10	-.0833	-.0012	-.0812	-.0224	-.0573	-.0491	-.0468	-.0188	-.0156	.0090	.1454
	11	-.0793	-.0780	-.0719	-.0623	-.0475	-.0347	-.0154	-.0124	.0752	.1403	.2353
	12	-.0703	-.0615	-.0555	-.0482	-.0337	-.0230	-.0066	.0793	.1646	.2384	.3243
	13	-.0681	-.0594	-.0522	-.0436	-.0292	-.0191	-.0056	.1680	.2532	.3271	.4130
	14	-.0597	-.0509	-.0431	-.0345	-.0207	-.0042	.1141	.2566	.3419	.4160	.5022
29	1	-3.3923	-3.1305	-2.9170	-2.6850	-2.3312	-1.9842	-1.5779	-1.4302	-1.2922	-1.1778	-1.0501
	2	-2.5673	-2.3983	-2.2447	-2.0860	-1.8361	-1.5787	-1.3197	-1.1377	-.9244	-.8138	-.6813

PERCENTILE POINTS OF THE NORMAL ORDER STATISTICS

N	1	.01	.025	.05	.10	.25	.50	.75	.90	.95	.975	.99
2	3	-2.1581	-2.0167	-1.8988	-1.7670	-1.5559	-1.3337	-1.1228	-.9413	-.8361	-.7466	-.6445
4	5	-1.8879	-1.7637	-1.6594	-1.5420	-1.3521	-1.1495	-.9549	-.7856	-.6867	-.6022	-.5054
6	7	-1.6814	-1.5679	-1.4721	-1.3638	-1.1874	-.9877	-.8138	-.6527	-.5581	-.4771	-.3840
8	9	-1.5116	-1.4055	-1.3156	-1.2136	-1.0466	-.8659	-.6897	-.5345	-.4430	-.3645	-.2740
10	11	-1.3656	-1.2647	-1.1791	-1.0817	-.9217	-.7476	-.5771	-.4263	-.3372	-.2605	-.1720
12	13	-1.2358	-1.1391	-1.0567	-.9528	-.8050	-.6390	-.4728	-.3253	-.2379	-.1626	-.0756
14	15	-1.1180	-1.0243	-.9445	-.8532	-.7025	-.5374	-.3745	-.2296	-.1435	-.0693	.0166
16	17	-1.0089	-.9177	-.8399	-.7507	-.6031	-.4411	-.2807	-.1377	-.0526	.0209	.0660
18	19	-.9066	-.8174	-.7411	-.6535	-.5084	-.3487	-.1902	-.0386	.0358	.1088	.1934
20	21	-.8094	-.7217	-.6466	-.5604	-.4172	-.2592	-.1021	.0386	.1225	.1952	.2796
22	23	-.7162	-.6297	-.5555	-.4703	-.3285	-.1717	-.0155	.1246	.2084	.2810	.3653
24	25	-.6260	-.5403	-.4669	-.3824	-.2416	-.0855	.0702	.2102	.2940	.3667	.4512
26	27	-.5379	-.4529	-.3799	-.2959	-.1557	.0000	.1557	.2959	.3799	.4529	.5379
28	29	-.4517	-.3663	-.2925	-.2093	-.0685	.0883	.2093	.3663	.4517	.5379	.6260
30	31	-.3672	-.2828	-.2093	-.1268	-.0000	.1268	.2828	.3672	.4517	.5379	.6260
32	33	-.2828	-.2093	-.1268	-.0000	.1268	.2828	.3672	.4517	.5379	.6260	.7162
34	35	-.2093	-.1268	-.0000	.1268	.2828	.3672	.4517	.5379	.6260	.7162	.8094
36	37	-.1268	-.0000	.1268	.2828	.3672	.4517	.5379	.6260	.7162	.8094	.9066
38	39	-.0000	.1268	.2828	.3672	.4517	.5379	.6260	.7162	.8094	.9066	1.0089
40	41	.1268	.2828	.3672	.4517	.5379	.6260	.7162	.8094	.9066	1.0089	1.1180
42	43	.2828	.3672	.4517	.5379	.6260	.7162	.8094	.9066	1.0089	1.1180	1.2358
44	45	.3672	.4517	.5379	.6260	.7162	.8094	.9066	1.0089	1.1180	1.2358	1.3656
46	47	.4517	.5379	.6260	.7162	.8094	.9066	1.0089	1.1180	1.2358	1.3656	1.5116
48	49	.5379	.6260	.7162	.8094	.9066	1.0089	1.1180	1.2358	1.3656	1.5116	1.6814
50	51	.6260	.7162	.8094	.9066	1.0089	1.1180	1.2358	1.3656	1.5116	1.6814	1.8879
52	53	.7162	.8094	.9066	1.0089	1.1180	1.2358	1.3656	1.5116	1.6814	1.8879	2.1581
54	55	.8094	.9066	1.0089	1.1180	1.2358	1.3656	1.5116	1.6814	1.8879	2.1581	2.4517
56	57	.9066	1.0089	1.1180	1.2358	1.3656	1.5116	1.6814	1.8879	2.1581	2.4517	2.7960
58	59	1.0089	1.1180	1.2358	1.3656	1.5116	1.6814	1.8879	2.1581	2.4517	2.7960	3.1653
60	61	1.1180	1.2358	1.3656	1.5116	1.6814	1.8879	2.1581	2.4517	2.7960	3.1653	3.5779
62	63	1.2358	1.3656	1.5116	1.6814	1.8879	2.1581	2.4517	2.7960	3.1653	3.5779	4.0360
64	65	1.3656	1.5116	1.6814	1.8879	2.1581	2.4517	2.7960	3.1653	3.5779	4.0360	4.5120
66	67	1.5116	1.6814	1.8879	2.1581	2.4517	2.7960	3.1653	3.5779	4.0360	4.5120	5.0379
68	69	1.6814	1.8879	2.1581	2.4517	2.7960	3.1653	3.5779	4.0360	4.5120	5.0379	5.6112
70	71	1.8879	2.1581	2.4517	2.7960	3.1653	3.5779	4.0360	4.5120	5.0379	5.6112	6.2445
72	73	2.1581	2.4517	2.7960	3.1653	3.5779	4.0360	4.5120	5.0379	5.6112	6.2445	6.9403
74	75	2.4517	2.7960	3.1653	3.5779	4.0360	4.5120	5.0379	5.6112	6.2445	6.9403	7.7056
76	77	2.7960	3.1653	3.5779	4.0360	4.5120	5.0379	5.6112	6.2445	6.9403	7.7056	8.5403
78	79	3.1653	3.5779	4.0360	4.5120	5.0379	5.6112	6.2445	6.9403	7.7056	8.5403	9.4403
80	81	3.5779	4.0360	4.5120	5.0379	5.6112	6.2445	6.9403	7.7056	8.5403	9.4403	10.4036
82	83	4.0360	4.5120	5.0379	5.6112	6.2445	6.9403	7.7056	8.5403	9.4403	10.4036	11.4403
84	85	4.5120	5.0379	5.6112	6.2445	6.9403	7.7056	8.5403	9.4403	10.4036	11.4403	12.5403
86	87	5.0379	5.6112	6.2445	6.9403	7.7056	8.5403	9.4403	10.4036	11.4403	12.5403	13.7056
88	89	5.6112	6.2445	6.9403	7.7056	8.5403	9.4403	10.4036	11.4403	12.5403	13.7056	14.9403
90	91	6.2445	6.9403	7.7056	8.5403	9.4403	10.4036	11.4403	12.5403	13.7056	14.9403	16.2445
92	93	6.9403	7.7056	8.5403	9.4403	10.4036	11.4403	12.5403	13.7056	14.9403	16.2445	17.6112
94	95	7.7056	8.5403	9.4403	10.4036	11.4403	12.5403	13.7056	14.9403	16.2445	17.6112	19.0403
96	97	8.5403	9.4403	10.4036	11.4403	12.5403	13.7056	14.9403	16.2445	17.6112	19.0403	20.5403
98	99	9.4403	10.4036	11.4403	12.5403	13.7056	14.9403	16.2445	17.6112	19.0403	20.5403	22.1403
100	101	10.4036	11.4403	12.5403	13.7056	14.9403	16.2445	17.6112	19.0403	20.5403	22.1403	23.8403

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TABLE 2 Contd.

PERCENTILE POINTS OF THE CHI (1 D.F.) ORDER STATISTICS

N	1	.61	.625	.65	.70	.75	.80	.85	.90	.95	.975	.99
2	1	.0063	.0153	.0317	.0644	.1687	.3757	.6745	1.0022	1.2170	1.4114	1.6449
	2	.1257	.1995	.2840	.4073	.6745	1.0618	1.4980	1.9488	2.2205	2.4955	2.8062
3	1	.0042	.0105	.0212	.0433	.1149	.2615	.4818	.7320	.8995	1.0529	1.2387
	2	.0749	.1185	.1705	.2470	.4211	.6745	.9811	1.2936	1.4933	1.6731	1.8899
	3	.2734	.3751	.4795	.6191	.8264	1.2538	1.6871	2.1141	2.3877	2.6354	2.9242
4	1	.0031	.0079	.0160	.0326	.0871	.2007	.3757	.5794	.7178	.8459	1.0022
	2	.0527	.0848	.1226	.1796	.2695	.4040	.5745	.7465	1.0157	1.2985	1.4726
	3	.1775	.2457	.3168	.4131	.5673	.8674	1.1671	1.4663	1.6565	1.8278	2.0335
	4	.4072	.5710	.6324	.7762	1.0518	1.4081	1.8158	2.2262	2.4009	2.7313	3.0222
5	1	.0025	.0053	.0128	.0261	.0701	.1630	.3081	.4804	.5988	.7092	.8450
	2	.0410	.0662	.0920	.1411	.2453	.4040	.6040	.8132	.9491	1.0723	1.2210
	3	.1328	.1948	.2395	.3142	.4660	.6745	.9164	1.1586	1.3128	1.4518	1.6181
	4	.2800	.3633	.4435	.5677	.7485	1.0073	1.2995	1.5882	1.7717	1.9370	2.1360
	5	.5217	.6405	.7542	.8983	1.1697	1.5163	1.9117	2.3107	2.5688	2.8038	3.0891
6	1	.0021	.0043	.0107	.0218	.0587	.1372	.2615	.4107	.5144	.6117	.7320
	2	.0335	.0543	.0789	.1163	.2034	.3378	.5093	.6908	.8096	.9177	1.0487
	3	.1064	.1486	.1932	.2545	.3812	.5554	.7608	.9577	1.1000	1.2192	1.3624
	4	.2186	.2829	.3449	.4305	.5930	.8040	1.0431	1.2790	1.4285	1.5627	1.7239
	5	.3777	.4660	.5548	.6583	.8606	1.1159	1.4012	1.6819	1.8603	2.0211	2.2150
	6	.6191	.7401	.8561	.9971	1.2638	1.6022	1.9880	2.3780	2.6310	2.8619	3.1428
7	1	.0018	.0045	.0092	.0187	.0505	.1184	.2271	.3589	.4512	.5383	.6465
	2	.0284	.0460	.0669	.0900	.1738	.2904	.4409	.6016	.7074	.8042	.9218
	3	.0793	.1244	.1621	.2142	.3227	.4735	.6528	.8368	.9517	1.0572	1.1842
	4	.1793	.2428	.2863	.3666	.4940	.6745	.8800	1.0335	1.2125	1.3284	1.4674
	5	.3007	.3724	.4417	.5309	.6965	.9075	1.1429	1.3734	1.5190	1.6498	1.8067
	6	.4630	.5553	.6423	.7511	.9528	1.2043	1.4834	1.7476	1.9315	2.0892	2.2790
	7	.7030	.8245	.9382	1.0756	1.3418	1.6733	2.0510	2.4339	2.6828	2.9104	3.1876
8	1	.0016	.0040	.0080	.0164	.0443	.1042	.2007	.3189	.4020	.4809	.5794
	2	.0246	.0390	.0582	.0851	.1518	.2548	.3890	.5334	.6290	.7168	.8238
	3	.0762	.1070	.1397	.1851	.2801	.4132	.5728	.7350	.8411	.9363	1.0511
	4	.1622	.2199	.2642	.3350	.4265	.5831	.7646	.9651	1.0598	1.1629	1.2867
	5	.2510	.3119	.3708	.4463	.5896	.7719	.9760	1.1758	1.3020	1.4142	1.5508
	6	.3762	.4526	.5248	.6155	.7837	.9934	1.2250	1.4507	1.5932	1.7211	1.8747
	7	.5389	.6333	.7214	.8305	1.0307	1.2783	1.5521	1.8209	1.9918	2.1462	2.3328
	8	.7762	.8976	1.0103	1.1501	1.4081	1.7336	2.1047	2.4315	2.7270	2.9518	3.2260
9	1	.0014	.0035	.0071	.0146	.0393	.0930	.1799	.2368	.3626	.4348	.5251
	2	.0218	.0353	.0514	.0762	.1247	.2271	.3481	.4794	.5668	.6472	.7455
	3	.0669	.0940	.1228	.1630	.2475	.3664	.5108	.6590	.7548	.8318	.9460
	4	.1323	.1776	.2131	.2668	.3732	.5145	.6776	.8306	.9444	1.0379	1.1503

TABLE 3

PERCENTILE POINTS OF THE CHI (1 D.F.) ORDER STATISTICS

N	1	.01	.025	.05	.10	.25	.50	.75	.90	.95	.975	.99
9	5	.2159	.2689	.3204	.3866	.4674	.5745	.6561	1.0364	1.170	1.2481	1.3691
6	7	.3167	.3844	.4467	.5252	.6114	.7114	.8340	1.2525	1.3752	1.4871	1.6100
7	8	.4450	.5243	.5983	.6802	.7749	.8864	1.0245	1.5161	1.6559	1.7814	1.9321
8	9	.6067	.7023	.7947	.8995	1.0179	1.1519	1.3111	1.8752	2.0433	2.1953	2.3791
9	10	.8007	.9016	1.0032	1.1114	1.2266	1.3588	1.5112	2.2229	2.4655	2.6879	2.9556
10	11	.0013	.0032	.0064	.0131	.0255	.0440	.0691	.2607	.3304	.3968	.4804
2	3	.0195	.0316	.0461	.0684	.1011	.1408	.1852	.4356	.5160	.5903	.6814
3	4	.0596	.0837	.1096	.1457	.1920	.2409	.2913	.5972	.6854	.7655	.8628
4	5	.1171	.1529	.1892	.2373	.2900	.3469	.4083	.7583	.8535	.9394	1.0426
5	6	.1897	.2367	.2855	.3416	.4047	.4746	.5484	.8264	1.0289	1.1208	1.2310
6	7	.2772	.3350	.3961	.4606	.5295	.6033	.6813	1.0893	1.2701	1.3102	1.4240
7	8	.3814	.4504	.5169	.5892	.6667	.7497	.8388	1.3178	1.4394	1.5483	1.6757
8	9	.5075	.5887	.6637	.7561	.8441	.9378	1.0345	1.5725	1.7100	1.8324	1.9818
9	10	.6677	.7638	.8521	.9464	1.0458	1.1495	1.2565	1.9226	2.0883	2.2382	2.4126
10	11	.8583	1.0184	1.1791	1.3456	1.5163	1.6919	1.8723	2.5595	2.7996	3.0199	3.2893
11	12	.0011	.0029	.0048	.0079	.0124	.0176	.0236	.2300	.3034	.3650	.4428
2	3	.0176	.0286	.0418	.0620	.0824	.1066	.1360	.2892	.3638	.4299	.5277
3	4	.0537	.0755	.0989	.1317	.1670	.2060	.2498	.5463	.6281	.7027	.7932
4	5	.1060	.1374	.1701	.2127	.2580	.3071	.3601	.6915	.7796	.8502	.9550
5	6	.1692	.2115	.2528	.3062	.3627	.4216	.4820	.8407	.9350	1.0196	1.1212
6	7	.2456	.2973	.3469	.4044	.4627	.5216	.5820	.9092	1.0022	1.0904	1.2080
7	8	.3368	.3960	.4534	.5192	.5845	.6506	.7184	1.1737	1.2828	1.3803	1.4970
8	9	.4393	.5104	.5764	.6477	.7149	.7826	.8518	1.3747	1.4944	1.6015	1.7298
9	10	.5664	.6484	.7223	.8049	.8829	.9618	1.0473	1.6221	1.7576	1.8792	2.0254
10	11	.7298	.8190	.9073	1.0047	1.1009	1.1968	1.2981	1.9447	2.1282	2.2745	2.4554
11	12	.9501	1.0693	1.1790	1.3139	1.4515	1.5790	1.7200	2.5923	2.8302	3.0486	3.3160
12	13	.0000	.0026	.0043	.0070	.0097	.0140	.0172	.2206	.2805	.3380	.4107
2	3	.0161	.0262	.0382	.0567	.0758	.1013	.1261	.3685	.4381	.5027	.5822
3	4	.0489	.0688	.0902	.1202	.1538	.1900	.2286	.5037	.5800	.6497	.7345
4	5	.0893	.1247	.1566	.1945	.2347	.2780	.3241	.6361	.7181	.7924	.8819
5	6	.1428	.1912	.2280	.2776	.3291	.3838	.4417	.7095	.8581	.9368	1.0313
6	7	.2204	.2765	.3124	.3694	.4266	.4838	.5411	.9110	1.0043	1.0878	1.1878
7	8	.2988	.3540	.4060	.4709	.5308	.5957	.6606	1.0621	1.1618	1.2510	1.3575
8	9	.3895	.4522	.5113	.5843	.6519	.7246	.7974	1.2300	1.3376	1.4337	1.5486
9	10	.4927	.5653	.6321	.7119	.7848	.8618	.9384	1.4249	1.5299	1.6485	1.7750
10	11	.6168	.6997	.7754	.8678	.9499	1.0416	1.1290	1.6663	1.7999	1.9200	2.0644
11	12	.7740	.8691	.9568	1.0436	1.1261	1.2099	1.2900	2.0024	2.1641	2.3105	2.4830
12	13	.9971	1.0155	1.0224	1.0376	1.0502	1.0602	1.0691	2.6220	2.8578	3.0747	3.3402
13	14	.0019	.0024	.0049	.0071	.0093	.0131	.0171	.2049	.2609	.3148	.3830
2	3	.0168	.0241	.0352	.0523	.0693	.0953	.1257	.3422	.4075	.4681	.5420
3	4	.0489	.0672	.0879	.1105	.1353	.1639	.1962	.4674	.5390	.6045	.6842
4	5	.0817	.1147	.1417	.1784	.2157	.2532	.2908	.5892	.6661	.7358	.8200
5	6	.1304	.1746	.2001	.2440	.2885	.3322	.3753	.7110	.7937	.8674	.9559
6	7	.2004	.2433	.2845	.3368	.3855	.4308	.4710	.8385	.9253	1.0032	1.0984

TABLE 3 Contd.

PERCENTILE POINTS OF THE CHI (1 D.F.) ORDER STATISTICS

N	1	.01	.025	.05	.10	.25	.50	.75	.90	.95	.975	.99
13	7	.2700	.3204	.3679	.4273	.5374	.6745	.8256	.9724	1.0646	1.1471	1.2457
	8	.3490	.4067	.4604	.5269	.6484	.7976	.9656	1.1176	1.2161	1.3040	1.4091
	9	.4387	.5040	.5642	.6381	.7717	.9342	1.1106	1.2801	1.3863	1.4811	1.5945
	10	.5471	.6156	.6829	.7550	.9125	1.0910	1.2840	1.4698	1.5863	1.6906	1.8154
	11	.6648	.7490	.8237	.9158	1.0808	1.2803	1.4967	1.7061	1.8381	1.9567	2.0905
	12	.7819	.8748	.9590	1.0601	1.2481	1.4740	1.7466	2.0265	2.1965	2.3415	2.5174
	13	1.0001	1.1575	1.2652	1.3973	1.5392	1.7648	2.0273	2.3491	2.6831	3.0084	3.4624
14	1	.0000	.0023	.0046	.0094	.0255	.0606	.1184	.1912	.2438	.2945	.3589
	2	.0137	.0223	.0326	.0485	.0663	.1072	.1789	.2795	.3809	.4981	.6088
	3	.0414	.0684	.0767	.1023	.1570	.2359	.3345	.4361	.5035	.5651	.6407
	4	.0802	.1053	.1308	.1649	.2334	.3267	.4368	.5490	.6214	.6871	.7666
	5	.1291	.1606	.1926	.2342	.3148	.4203	.5413	.6619	.7389	.8082	.8917
	6	.1836	.2232	.2612	.3086	.4012	.5179	.6388	.7775	.8589	.9219	1.0105
	7	.2455	.2928	.3366	.3915	.4934	.6179	.7513	.8981	.9842	1.0612	1.1532
	8	.3171	.3700	.4192	.4805	.5925	.7304	.8811	1.0267	1.1180	1.1994	1.2967
	9	.3961	.4557	.5107	.5782	.7007	.8498	1.0116	1.1671	1.2644	1.3513	1.4550
	10	.4833	.5519	.6128	.6872	.8200	.9827	1.1574	1.3251	1.4300	1.5236	1.6356
	11	.5818	.6570	.7296	.8117	.9586	1.1357	1.3248	1.5104	1.6256	1.7286	1.8320
	12	.7091	.7924	.8680	.9597	1.1235	1.3211	1.5351	1.7422	1.8727	1.9901	2.1114
	13	.8613	.9563	1.0435	1.1487	1.3376	1.5674	1.8178	2.0678	2.2262	2.3690	2.5347
	14	1.0796	1.1962	1.3028	1.4337	1.6733	1.9747	2.3200	2.6739	2.9063	3.1293	3.3323
15	1	.0008	.0021	.0043	.0088	.0238	.0566	.1109	.1792	.2289	.2767	.3376
	2	.0128	.0208	.0304	.0452	.0685	.1076	.1643	.2397	.3377	.4118	.5083
	3	.0385	.0543	.0713	.0952	.1463	.2202	.3120	.4088	.4725	.5310	.6025
	4	.0745	.0978	.1214	.1532	.2173	.3047	.4083	.5141	.5825	.6447	.7201
	5	.1185	.1487	.1785	.2172	.2926	.3914	.5051	.6188	.6915	.7570	.8361
	6	.1695	.2062	.2415	.2866	.3721	.4813	.6042	.7253	.8020	.8709	.9534
	7	.2269	.2698	.3104	.3614	.4563	.5752	.7069	.8353	.9162	.9886	1.0752
	8	.2907	.3466	.3953	.4470	.5461	.6745	.8151	.9512	1.0365	1.1126	1.2034
	9	.3615	.4216	.4671	.5295	.6428	.7809	.9211	1.0754	1.1657	1.2463	1.3424
	10	.4403	.5012	.5457	.6256	.7483	.8971	1.0577	1.2118	1.3080	1.3938	1.4963
	11	.5289	.5963	.6577	.7323	.8659	1.0269	1.2000	1.3659	1.4696	1.5622	1.6729
	12	.6303	.7049	.7726	.8546	.9908	1.1765	1.3657	1.5474	1.6613	1.7632	1.8953
	13	.7501	.8334	.9088	1.0000	1.1277	1.3185	1.5203	1.7252	1.9045	2.0707	2.1604
	14	.9004	.9955	1.0817	1.1851	1.3273	1.5000	1.6808	2.0965	2.2535	2.3940	2.5500
	15	1.1162	1.2318	1.3376	1.4473	1.6046	2.0032	2.3456	2.9965	2.9278	3.1405	3.4017
16	1	.0008	.0020	.0040	.0082	.0223	.0532	.1042	.1688	.2157	.2610	.3188
	2	.0120	.0194	.0284	.0423	.0755	.1291	.2014	.2822	.3371	.3885	.4521
	3	.0360	.0507	.0667	.0891	.1370	.2066	.2931	.3847	.4422	.5008	.5688
	4	.0695	.0912	.1134	.1431	.2033	.2855	.3833	.4834	.5484	.6075	.6791
	5	.1133	.1385	.1663	.2026	.2773	.3663	.4746	.5617	.6501	.7124	.7874
	6	.1574	.1916	.2247	.2668	.3470	.4497	.5656	.6800	.7527	.8190	.8964
	7	.2102	.2502	.2881	.3357	.4246	.5363	.6603	.7814	.8578	.9242	1.0081
	8	.2685	.3140	.3566	.4095	.5068	.6271	.7592	.8871	.9673	1.0301	1.1248
	9	.3328	.3837	.4308	.4888	.5944	.7234	.8638	.9989	1.0895	1.1589	1.2489

PERCENTILE POINTS OF THE CHI (1 D.F.) ORDER STATISTICS

N	1	.01	.025	.05	.10	.25	.50	.75	.90	.95	.975	.99
16	10	.6035	.4508	.5115	.5748	.6888	.8270	.9764	1.1195	1.2089	1.2886	1.3837
	11	.4818	.5437	.6002	.6690	.7921	.9203	1.0998	1.2524	1.3777	1.4326	1.5330
	12	.5606	.6275	.6992	.7740	.9073	1.0672	1.2369	1.4032	1.5058	1.5974	1.7260
	13	.6699	.7447	.8124	.8942	1.0397	1.2140	1.4015	1.5813	1.6941	1.7949	1.9159
	14	.7883	.8715	.9466	1.0374	1.1988	1.3929	1.6028	1.8057	1.9337	2.0489	2.1876
	15	.9368	1.0315	1.1171	1.2208	1.4034	1.6319	1.8798	2.1731	2.3788	2.4202	2.5019
	16	1.1501	1.2649	1.3698	1.4984	1.7332	2.0296	2.3693	2.7192	2.9478	3.1594	3.4193
17	1	.0007	.0010	.0038	.0077	.0210	.0501	.0982	.1594	.2039	.2470	.3019
	2	.0112	.0183	.0267	.0398	.0710	.1216	.1900	.2665	.3188	.3677	.4284
	3	.0337	.0476	.0626	.0837	.1288	.1945	.2765	.3624	.4200	.4739	.5387
	4	.0651	.0855	.1063	.1343	.1910	.2686	.3612	.4664	.5181	.5744	.6428
	5	.1032	.1206	.1558	.1899	.2565	.3443	.4460	.5681	.6136	.6720	.7444
	6	.1469	.1700	.2100	.2497	.3252	.4221	.5318	.6464	.7094	.7715	.8461
	7	.1958	.2333	.2688	.3135	.3972	.5025	.6198	.7345	.8069	.8719	.9496
	8	.2406	.2922	.3320	.3816	.4730	.5863	.7109	.8318	.9078	.9756	1.0568
	9	.3084	.3650	.4000	.4543	.5532	.6745	.8066	.9338	1.0135	1.0846	1.1694
	10	.3727	.4251	.4733	.5323	.6389	.7682	.9081	1.0423	1.1261	1.2008	1.2898
	11	.4431	.4935	.5430	.6068	.7183	.8493	1.0018	1.1398	1.2283	1.3072	1.3913
	12	.5206	.5685	.6164	.6794	.7925	.9201	1.0784	1.2207	1.2940	1.3688	1.4483
	13	.6077	.6521	.6956	.7537	.8666	1.0044	1.1747	1.3301	1.3891	1.4598	1.5383
	14	.7049	.7418	.7781	.8310	.9457	1.0945	1.2638	1.4127	1.4743	1.5463	1.6241
	15	.8240	.8570	.8918	1.0720	1.2324	1.4043	1.6328	1.8330	1.9608	2.0754	2.2124
	16	.9708	1.0650	1.1500	1.2530	1.4311	1.6607	1.9062	2.1777	2.3023	2.4437	2.6133
	17	1.1818	1.2957	1.3998	1.5274	1.7606	2.0542	2.3915	2.7482	2.9644	3.1770	3.4357
18	1	.0007	.0018	.0036	.0073	.0199	.0474	.0930	.1511	.1934	.2344	.2868
	2	.0106	.0172	.0252	.0375	.0671	.1149	.1798	.2527	.3024	.3490	.4070
	3	.0318	.0449	.0590	.0789	.1216	.1838	.2616	.3444	.3992	.4498	.5118
	4	.0612	.0804	.1000	.1265	.1801	.2537	.3416	.4322	.4911	.5449	.6102
	5	.0965	.1218	.1464	.1786	.2416	.3249	.4214	.5187	.5812	.6378	.7061
	6	.1378	.1680	.1972	.2346	.3059	.3978	.5020	.6053	.6711	.7303	.8016
	7	.1833	.2185	.2520	.2942	.3732	.4729	.5820	.6932	.7622	.8240	.8982
	8	.2332	.2732	.3107	.3574	.4437	.5508	.6689	.7936	.8557	.9202	.9974
	9	.2875	.3321	.3755	.4246	.5178	.6322	.7571	.8775	.9530	1.0203	1.1007
	10	.3465	.3956	.4407	.4961	.5961	.7180	.8499	.9764	1.0555	1.1259	1.2100
	11	.4105	.4641	.5137	.5729	.6801	.8095	.9488	1.0821	1.1651	1.2391	1.3273
	12	.4805	.5387	.5917	.6560	.7707	.9083	1.0559	1.1968	1.2845	1.3627	1.4558
	13	.5575	.6207	.6779	.7471	.8700	1.0169	1.1741	1.3240	1.4175	1.5007	1.6000
	14	.6425	.7121	.7741	.8487	.9811	1.1390	1.3070	1.4692	1.5700	1.6598	1.7673
	15	.7417	.8166	.8840	.9653	1.1091	1.2809	1.4651	1.6418	1.7525	1.8515	1.9704
	16	.8575	.9402	1.0147	1.1044	1.2636	1.4545	1.6607	1.8602	1.9861	2.0994	2.2350
	17	1.0027	1.0963	1.1809	1.2831	1.4658	1.6875	1.9310	2.1708	2.3243	2.4637	2.6333
	18	1.2114	1.3246	1.4279	1.5544	1.7858	2.0773	2.4122	2.7468	2.9840	3.1934	3.4512
19	1	.0007	.0017	.0034	.0069	.0188	.0449	.0883	.1435	.1838	.2230	.2731
	2	.0100	.0163	.0239	.0355	.0690	.1090	.1707	.2401	.2876	.3322	.3873
	3	.0300	.0424	.0558	.0746	.1151	.1742	.2483	.3272	.3797	.4280	.4874

PERCENTILE POINTS OF THE CHI (1 D.F.) COVER STATISTICS

W	Y	01	025	05	10	25	50	75	90	975	995
39	4	0539	0750	0905	1105	1703	2403	3241	4105	5183	5819
5	5	0591	1149	1382	1984	2784	3775	4905	6223	7821	9717
6	6	1797	1583	1959	2713	2885	3762	4754	5740	6935	7617
7	7	1773	2056	2337	2771	3520	4467	5526	6466	7815	8522
8	8	2190	2654	3004	3345	4170	5195	6318	7310	8715	10450
9	9	2694	3114	3504	3895	4868	5952	7137	8232	9861	12005
10	10	3239	3700	4126	4643	5694	6745	7932	9133	1093	13168
11	11	3827	4320	4791	5313	6443	7683	8997	10369	12421	14761
12	12	4454	4990	5496	6078	7285	8647	10097	11644	13898	16418
13	13	5128	5747	6381	7052	8345	9765	11245	12890	15744	18618
14	14	5852	6557	7281	8022	9445	10965	12607	14370	17344	20595
15	15	6727	7460	8209	8982	10543	12211	13988	15880	18877	22305
16	16	7763	8542	9335	10142	11870	13710	15647	17680	21877	25705
17	17	8959	9713	10465	11234	12993	14842	16780	18809	23221	27658
18	18	10326	11127	12008	12813	14620	16517	18504	20578	23844	28570
19	19	12003	12851	13763	14679	16505	18489	20537	22744	26091	314657
20	20	0006	0016	0026	0065	0123	0207	0325	0467	0759	10606
1	1	0055	0155	0226	0337	0463	0606	0765	0937	1217	1607
2	2	0285	0412	0509	0650	0809	0986	1180	1391	1723	2207
3	3	0527	0679	0806	0982	1186	1416	1660	1917	2383	3056
4	4	0864	1087	1268	1508	1765	2040	2339	2653	3193	3963
5	5	1276	1496	1748	2024	2327	2640	2970	3314	3968	4907
6	6	1763	1941	2241	2570	2927	3292	3674	4066	4963	6253
7	7	2354	2620	2915	3214	3530	3872	4230	4604	5688	7253
8	8	3061	3391	3740	4114	4515	4942	5394	5866	7243	9114
9	9	3880	4261	4680	5134	5615	6122	6654	7213	8982	11443
10	10	4821	5260	5739	6250	6793	7366	7960	8581	10743	13874
11	11	5886	6385	6914	7474	8055	8666	9306	9967	12543	16191
12	12	7071	7620	8189	8780	9393	10026	10689	11381	14006	18176
13	13	8386	8985	9594	10224	10885	11576	12296	13046	15899	20514
14	14	9831	10470	11169	11918	12617	13366	14154	14981	18137	23337
15	15	11406	12195	12984	13823	14612	15450	16337	17272	20897	26937
16	16	13121	13960	14799	15688	16527	17415	18352	19337	23492	30192
17	17	15076	15965	16854	17793	18682	19620	20607	21644	26397	33992
18	18	17281	18210	19149	20138	21077	22065	23102	24189	29592	38192
19	19	20736	21715	22694	23723	24702	25740				

PERCENTILE POINTS OF THE CHI (1 D.F.) ORDER STATISTICS

N	I	.01	.025	.05	.10	.25	.50	.75	.90	.95	.975	.99
21	11	.3374	.3824	.4236	.4739	.5666	.6745	.7972	.9070	.9779	1.0411	1.1165
	12	.3917	.4402	.4846	.5382	.6364	.7502	.8746	.9734	1.0674	1.1332	1.2116
	13	.4439	.5070	.5603	.6165	.7208	.8404	.9610	1.0853	1.1626	1.2373	1.3132
	14	.4977	.5665	.6300	.6908	.8037	.9344	1.0637	1.1842	1.2653	1.3473	1.4273
	15	.5509	.6245	.6965	.7692	.8873	1.0298	1.1648	1.2925	1.3781	1.4563	1.5350
	16	.6058	.6843	.7613	.8464	.9683	1.1179	1.2669	1.4134	1.5045	1.5857	1.6625
	17	.6627	.7453	.8263	.9139	1.0415	1.2004	1.3527	1.5005	1.5927	1.6747	1.7481
	18	.7214	.8089	.8943	.9829	1.1155	1.2855	1.4566	1.6218	1.7163	1.7976	1.8726
	19	.7819	.8743	.9643	1.0579	1.1955	1.3705	1.5486	1.7230	1.8207	1.9016	1.9766
	20	.8444	.9417	1.0356	1.1328	1.2754	1.4647	1.6527	1.8320	1.9307	2.0048	2.0766
	21	.9089	1.0113	1.1106	1.2128	1.3615	1.5645	1.7615	1.9467	2.0454	2.1198	2.1926
22	1	.3086	.3514	.3929	.4360	.5363	.6549	.7866	.9000	1.0000	1.0907	1.1799
	2	.3681	.4153	.4606	.5082	.6125	.7364	.8746	.9734	1.0674	1.1532	1.2399
	3	.4287	.4800	.5286	.5792	.6883	.8174	.9610	1.0853	1.1800	1.2616	1.3442
	4	.4904	.5457	.5982	.6538	.7683	.9024	1.0510	1.1800	1.2700	1.3476	1.4262
	5	.5532	.6125	.6690	.7287	.8483	.9874	1.1410	1.2700	1.3550	1.4286	1.5032
	6	.6171	.6799	.7394	.7992	.9233	1.0674	1.2250	1.3500	1.4300	1.4986	1.5692
	7	.6821	.7487	.8100	.8712	.9993	1.1474	1.3092	1.4300	1.5050	1.5692	1.6358
	8	.7481	.8177	.8810	.9442	1.0763	1.2284	1.3942	1.5100	1.5800	1.6392	1.6998
	9	.8151	.8883	.9540	1.0202	1.1573	1.3144	1.4842	1.6000	1.6650	1.7192	1.7758
	10	.8831	.9599	1.0290	1.0992	1.2413	1.4024	1.5762	1.6900	1.7500	1.7992	1.8500
	11	.9521	1.0317	1.1040	1.1772	1.3243	1.4894	1.6662	1.7750	1.8300	1.8742	1.9200
	12	1.0221	1.1047	1.1790	1.2542	1.4053	1.5744	1.7552	1.8580	1.9080	1.9462	1.9850
	13	1.0931	1.1787	1.2550	1.3322	1.4883	1.6614	1.8462	1.9440	1.9900	2.0222	2.0550
23	1	.2855	.3283	.3729	.4194	.5207	.6423	.7806	.8900	1.0000	1.0807	1.1619
	2	.3450	.3913	.4386	.4879	.5922	.7174	.8596	.9634	1.0500	1.1250	1.2012
	3	.4055	.4548	.5050	.5572	.6655	.7944	.9406	1.0400	1.1100	1.1792	1.2500
	4	.4670	.5193	.5735	.6297	.7420	.8754	1.0250	1.1200	1.1850	1.2492	1.3150
	5	.5295	.5848	.6410	.6992	.8155	.9534	1.1050	1.1950	1.2550	1.3142	1.3750
	6	.5930	.6513	.7095	.7707	.8910	1.0324	1.1870	1.2700	1.3250	1.3792	1.4350
	7	.6575	.7187	.7790	.8422	.9675	1.1124	1.2700	1.3450	1.3950	1.4442	1.4950
	8	.7230	.7873	.8515	.9187	1.0480	1.2000	1.3600	1.4300	1.4750	1.5192	1.5650
	9	.7895	.8578	.9260	.9972	1.1315	1.2850	1.4500	1.5150	1.5550	1.5942	1.6350
	10	.8570	.9283	.9995	1.0737	1.2130	1.3700	1.5400	1.6000	1.6350	1.6692	1.7050
	11	.9255	.9997	1.0730	1.1492	1.2925	1.4550	1.6300	1.6850	1.7150	1.7442	1.7800
	12	.9940	1.0693	1.1435	1.2217	1.3690	1.5350	1.7150	1.7650	1.7900	1.8142	1.8450
	13	1.0625	1.1398	1.2130	1.2932	1.4445	1.6150	1.7950	1.8400	1.8600	1.8800	1.9100

PERCENTILE POINTS OF THE CHI 11 D.F. ORDER STATISTICS

N	I	.01	.025	.05	.10	.25	.50	.75	.90	.95	.975	.99
23	14	.4536	.5035	.5488	.5934	.7005	.8163	.9400	1.0575	1.1306	1.1954	1.2726
	15	.5109	.5641	.6121	.6599	.7777	.8937	1.0231	1.1459	1.2222	1.2899	1.3705
	16	.5727	.6307	.6801	.7281	.8501	.9760	1.1127	1.2415	1.3222	1.3925	1.4771
	17	.6396	.6998	.7538	.8035	.9325	1.0674	1.2106	1.3454	1.4308	1.5059	1.5962
	18	.7131	.7772	.8347	.8835	1.0245	1.1676	1.3196	1.4440	1.5339	1.6139	1.7093
	19	.7949	.8636	.9241	.9886	1.1380	1.2811	1.4442	1.5995	1.6954	1.7829	1.8861
	20	.8882	.9624	1.0317	1.0981	1.2430	1.4141	1.5917	1.7419	1.8686	1.9642	2.0789
	21	.9983	1.0705	1.1427	1.2104	1.3506	1.5380	1.7269	1.9594	2.0911	2.2009	2.3332
	22	1.1367	1.2270	1.3100	1.3890	1.5815	1.7997	2.0651	2.2674	2.4164	2.5520	2.7173
	23	1.3353	1.4460	1.5450	1.6333	1.8923	2.1742	2.4797	2.8359	3.0581	3.2636	3.5168
24	1	.0005	.0013	.0027	.0055	.0149	.0357	.0704	.1159	.1476	.1795	.2206
	2	.0079	.0129	.0188	.0281	.0533	.0865	.1362	.1925	.2313	.2679	.3127
	3	.0236	.0333	.0438	.0587	.0900	.1381	.1979	.2622	.3052	.3451	.3943
	4	.0451	.0594	.0740	.0938	.1342	.1902	.2580	.3286	.3749	.4174	.4693
	5	.0710	.0895	.1079	.1319	.1794	.2429	.3174	.3933	.4424	.4871	.5415
	6	.1004	.1228	.1445	.1725	.2263	.2963	.3766	.4572	.5088	.5556	.6121
	7	.1328	.1588	.1836	.2151	.2745	.3505	.4362	.5210	.5750	.6236	.6821
	8	.1677	.1972	.2249	.2597	.3250	.4058	.4964	.5852	.6414	.6918	.7523
	9	.2052	.2378	.2683	.3062	.3760	.4624	.5577	.6503	.7036	.7608	.8233
	10	.2450	.2807	.3139	.3547	.4293	.5203	.6203	.7167	.7771	.8311	.8955
	11	.2871	.3259	.3616	.4053	.4843	.5804	.6848	.7848	.8474	.9032	.9637
	12	.3318	.3733	.4117	.4582	.5417	.6425	.7470	.8525	.9270	.9777	1.0455
	13	.3790	.4237	.4643	.5136	.6016	.7072	.8165	.9295	.9956	1.0554	1.1265
	14	.4291	.4767	.5198	.5719	.6644	.7769	.8900	1.0053	1.0760	1.1370	1.2107
	15	.4824	.5330	.5785	.6335	.7318	.8465	.9607	1.0786	1.1592	1.2236	1.3003
	16	.5393	.5920	.6412	.6991	.8014	.9226	1.0454	1.1735	1.2493	1.3165	1.3966
	17	.6005	.6574	.7083	.7695	.8772	1.0045	1.1396	1.2676	1.3471	1.4176	1.5016
	18	.6669	.7272	.7812	.8459	.9536	1.0938	1.2362	1.3711	1.4549	1.5295	1.6182
	19	.7396	.8038	.8612	.9208	1.0376	1.1927	1.3438	1.4873	1.5765	1.6560	1.7508
	20	.8207	.8893	.9506	1.0240	1.1527	1.3049	1.4669	1.6212	1.7175	1.8034	1.9082
	21	.9131	.9877	1.0582	1.1372	1.2714	1.4264	1.5940	1.7821	1.8881	1.9831	2.0972
	22	1.0223	1.1033	1.1755	1.2623	1.4156	1.5988	1.7965	1.9898	2.1089	2.2179	2.3496
	23	1.1595	1.2563	1.3310	1.4203	1.6059	1.8187	2.0528	2.2938	2.4321	2.5671	2.7316
	24	1.3576	1.4666	1.5650	1.6676	1.9107	2.1908	2.5147	2.8494	3.0708	3.2757	3.5280
25	1	.0005	.0013	.0026	.0053	.0143	.0343	.0677	.1105	.1420	.1728	.2124
	2	.0076	.0123	.0181	.0269	.0483	.0831	.1309	.1851	.2226	.2579	.3022
	3	.0226	.0319	.0420	.0553	.0827	.1277	.1902	.2522	.2937	.3279	.3703
	4	.0457	.0597	.0760	.0990	.1387	.1966	.2740	.3410	.3608	.4013	.4521
	5	.0717	.0907	.1113	.1364	.1791	.2426	.3240	.4056	.4256	.4689	.5214
	6	.0982	.1212	.1453	.1744	.2209	.2883	.3747	.4594	.4803	.5265	.5822
	7	.1251	.1515	.1783	.2104	.2609	.3321	.4237	.5085	.5307	.5797	.6393
	8	.1524	.1822	.2113	.2454	.2990	.3743	.4717	.5569	.5802	.6314	.6944
	9	.1801	.2133	.2457	.2834	.3413	.4216	.5229	.6085	.6330	.6869	.7530
	10	.2082	.2447	.2807	.3224	.3843	.4696	.5769	.6640	.6898	.7457	.8140
	11	.2367	.2763	.3153	.3614	.4283	.5186	.6320	.7205	.7470	.8040	.8740
	12	.2656	.3083	.3503	.3984	.4703	.5656	.6849	.7750	.8020	.8600	.9310
	13	.2949	.3406	.3856	.4384	.5153	.6156	.7409	.8320	.8590	.9180	.9900
	14	.3246	.3723	.4193	.4754	.5573	.6626	.7949	.8870	.9140	.9740	1.0470
	15	.3547	.4043	.4533	.5134	.6003	.7116	.8509	.9440	.9710	1.0320	1.1060
	16	.3852	.4378	.4888	.5514	.6433	.7606	.9069	.9990	1.0260	1.0880	1.1630
	17	.4161	.4707	.5237	.5894	.6863	.8086	.9629	1.0550	1.0820	1.1450	1.2200
	18	.4474	.5039	.5589	.6274	.7303	.8586	.1019	1.1110	1.1380	1.1920	1.2670
	19	.4791	.5376	.5946	.6661	.7740	.9083	.1051	1.1590	1.1860	1.2400	1.3150
	20	.5112	.5717	.6312	.7064	.8193	.9606	.1119	1.2140	1.2410	1.2950	1.3700
	21	.5437	.6062	.6687	.7464	.8643	.1011	1.1530	1.2550	1.2820	1.3360	1.4110
	22	.5766	.6411	.7056	.7864	.9083	.1051	1.2030	1.3050	1.3320	1.3860	1.4610
	23	.6100	.6765	.7430	.8264	.9523	.1101	1.2580	1.3600	1.3870	1.4410	1.5160
	24	.6439	.7124	.7809	.8664	.9963	.1151	1.3020	1.4040	1.4310	1.4850	1.5600
	25	.6783	.7488	.8193	.9074	.1047	.1201	1.3460	1.4480	1.4750	1.5290	1.6040

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TABLE 3 Contd.

PERCENTILE POINTS OF THE CHI-SQUARE STATISTIC

	.01	.025	.05	.10	.25	.50	.75	.90	.95	.975	.99
1	6.635	7.879	10.828	13.277	15.491	16.266	16.919	17.535	18.475	19.591	21.024
2	5.991	7.378	10.597	13.021	15.378	16.013	16.641	17.275	18.169	19.215	20.593
3	5.408	6.944	10.243	12.601	15.085	15.679	16.291	16.919	17.708	18.758	20.090
4	4.841	6.571	9.886	12.202	14.799	15.393	16.005	16.633	17.422	18.469	19.758
5	4.351	6.256	9.590	11.916	14.553	15.142	15.754	16.382	17.171	18.218	19.428
6	3.940	5.991	9.348	11.678	14.338	14.927	15.539	16.167	16.956	18.007	19.191
7	3.599	5.764	9.141	11.476	14.141	14.730	15.342	15.969	16.758	17.800	18.978
8	3.357	5.557	8.955	11.291	13.961	14.549	15.160	15.786	16.575	17.612	18.779
9	3.153	5.370	8.791	11.126	13.801	14.384	15.005	15.630	16.419	17.457	18.601
10	2.979	5.200	8.642	10.982	13.658	14.235	14.864	15.489	16.278	17.316	18.450
11	2.826	5.046	8.506	10.850	13.529	14.100	14.730	15.354	16.142	17.179	18.312
12	2.693	4.906	8.381	10.729	13.412	13.979	14.611	15.235	16.023	17.058	18.187
13	2.576	4.779	8.266	10.615	13.305	13.868	14.500	15.124	15.912	16.946	18.072
14	2.473	4.663	8.160	10.511	13.207	13.769	14.400	15.024	15.816	16.850	17.966
15	2.382	4.557	8.062	10.417	13.116	13.677	14.311	14.932	15.724	16.761	17.869
16	2.299	4.461	7.971	10.331	13.031	13.590	14.224	14.846	15.638	16.677	17.780
17	2.224	4.374	7.886	10.252	12.952	13.509	14.141	14.764	15.556	16.597	17.697
18	2.155	4.295	7.806	10.179	12.879	13.433	14.064	14.687	15.478	16.520	17.619
19	2.092	4.223	7.731	10.111	12.811	13.361	13.990	14.613	15.403	16.445	17.545
20	2.034	4.157	7.661	10.047	12.747	13.293	13.920	14.545	15.331	16.373	17.474
21	1.980	4.096	7.595	9.987	12.687	13.228	13.853	14.480	15.262	16.303	17.405
22	1.929	4.039	7.533	9.931	12.630	13.166	13.789	14.418	15.196	16.236	17.338
23	1.881	3.985	7.474	9.877	12.575	13.107	13.728	14.359	15.134	16.171	17.273
24	1.835	3.934	7.418	9.825	12.522	13.050	13.669	14.302	15.074	16.107	17.210
25	1.790	3.885	7.364	9.774	12.471	12.995	13.612	14.247	15.016	16.045	17.148
26	1.746	3.838	7.312	9.724	12.421	12.942	13.557	14.193	14.960	15.984	17.087
27	1.703	3.792	7.261	9.675	12.372	12.890	13.504	14.141	14.907	15.924	17.027
28	1.661	3.747	7.211	9.627	12.324	12.839	13.452	14.090	14.855	15.865	16.968
29	1.620	3.703	7.162	9.580	12.277	12.789	13.401	14.039	14.804	15.807	16.910
30	1.579	3.659	7.114	9.534	12.231	12.740	13.351	13.989	14.754	15.750	16.853
31	1.539	3.616	7.067	9.488	12.186	12.691	13.302	13.939	14.704	15.693	16.796
32	1.499	3.573	7.021	9.443	12.141	12.643	13.253	13.890	14.654	15.637	16.740
33	1.459	3.531	6.975	9.398	12.097	12.595	13.205	13.841	14.605	15.581	16.684
34	1.420	3.489	6.930	9.354	12.053	12.548	13.157	13.793	14.556	15.526	16.629
35	1.381	3.447	6.886	9.310	12.010	12.501	13.110	13.745	14.508	15.471	16.574
36	1.342	3.405	6.842	9.267	11.967	12.455	13.063	13.697	14.460	15.417	16.519
37	1.304	3.363	6.799	9.224	11.925	12.409	13.017	13.650	14.412	15.362	16.464
38	1.266	3.321	6.756	9.182	11.883	12.363	12.971	13.603	14.364	15.308	16.409
39	1.228	3.279	6.714	9.140	11.841	12.318	12.925	13.556	14.316	15.254	16.354
40	1.190	3.237	6.672	9.098	11.799	12.272	12.879	13.509	14.268	15.200	16.299
41	1.152	3.195	6.630	9.057	11.758	12.227	12.833	13.462	14.220	15.146	16.244
42	1.115	3.153	6.588	9.015	11.716	12.182	12.787	13.415	14.172	15.092	16.189
43	1.077	3.111	6.546	8.974	11.675	12.137	12.741	13.368	14.124	15.038	16.134
44	1.040	3.069	6.504	8.933	11.634	12.091	12.695	13.321	14.076	14.984	16.079
45	1.002	3.027	6.462	8.892	11.593	12.046	12.649	13.274	14.028	14.930	16.024
46	0.965	2.985	6.420	8.851	11.552	12.000	12.603	13.227	13.980	14.876	15.969
47	0.927	2.943	6.378	8.810	11.511	11.955	12.557	13.180	13.932	14.822	15.914
48	0.890	2.901	6.336	8.769	11.470	11.910	12.511	13.133	13.884	14.768	15.859
49	0.853	2.859	6.294	8.728	11.429	11.864	12.465	13.086	13.836	14.714	15.804
50	0.815	2.817	6.252	8.687	11.388	11.819	12.419	13.039	13.788	14.660	15.749
51	0.778	2.775	6.210	8.646	11.347	11.773	12.373	12.992	13.740	14.606	15.694
52	0.740	2.733	6.168	8.605	11.306	11.728	12.327	12.945	13.692	14.552	15.639
53	0.703	2.691	6.126	8.564	11.265	11.682	12.281	12.898	13.644	14.498	15.584
54	0.665	2.649	6.084	8.523	11.224	11.637	12.235	12.851	13.596	14.444	15.529
55	0.628	2.607	6.042	8.482	11.183	11.591	12.189	12.804	13.548	14.390	15.474
56	0.590	2.565	6.000	8.441	11.142	11.546	12.143	12.757	13.500	14.336	15.419
57	0.553	2.523	5.958	8.400	11.101	11.500	12.097	12.710	13.452	14.282	15.364
58	0.515	2.481	5.916	8.359	11.060	11.455	12.051	12.663	13.404	14.228	15.309
59	0.478	2.439	5.874	8.318	11.019	11.409	12.005	12.616	13.356	14.174	15.254
60	0.440	2.397	5.832	8.277	10.978	11.364	11.959	12.569	13.308	14.120	15.199
61	0.403	2.355	5.790	8.236	10.937	11.318	11.913	12.522	13.260	14.066	15.144
62	0.365	2.313	5.748	8.195	10.896	11.273	11.867	12.475	13.212	14.012	15.089
63	0.328	2.271	5.706	8.154	10.855	11.227	11.821	12.428	13.164	13.958	15.034
64	0.290	2.229	5.664	8.113	10.814	11.182	11.775	12.381	13.116	13.904	14.979
65	0.253	2.187	5.622	8.072	10.773	11.136	11.729	12.334	13.068	13.850	14.924
66	0.215	2.145	5.580	8.031	10.732	11.090	11.683	12.287	13.020	13.796	14.869
67	0.178	2.103	5.538	7.990	10.691	11.044	11.637	12.240	12.972	13.742	14.814
68	0.140	2.061	5.496	7.949	10.650	11.000	11.591	12.193	12.924	13.688	14.759
69	0.103	2.019	5.454	7.908	10.609	10.954	11.545	12.146	12.876	13.634	14.704
70	0.065	1.977	5.412	7.867	10.568	10.909	11.499	12.099	12.828	13.580	14.649
71	0.028	1.935	5.370	7.826	10.527	10.863	11.453	12.052	12.780	13.526	14.594
72	0.000	1.893	5.328	7.785	10.486	10.817	11.407	12.005	12.732	13.472	14.539
73		1.851	5.286	7.744	10.445	10.771	11.361	11.958	12.684	13.418	14.484
74		1.809	5.244	7.703	10.404	10.725	11.315	11.912	12.636	13.364	14.429
75		1.767	5.202	7.662	10.363	10.679	11.269	11.865	12.588	13.310	14.374
76		1.725	5.160	7.621	10.322	10.633	11.223	11.818	12.540	13.256	14.319
77		1.683	5.118	7.580	10.281	10.587	11.177	11.771	12.492	13.202	14.264
78		1.641	5.076	7.539	10.240	10.541	11.131	11.725	12.444	13.148	14.209
79		1.599	5.034	7.498	10.199	10.495	11.085	11.679	12.396	13.094	14.154
80		1.557	4.992	7.457	10.158	10.449	11.039	11.633	12.348	13.040	14.099
81		1.515	4.950	7.416	10.117	10.403	10.993	11.587	12.300	12.986	14.044
82		1.473	4.908	7.375	10.076	10.357	10.947	11.541	12.252	12.932	13.989
83		1.431	4.866	7.334	10.035	10.311	10.901	11.495	12.204	12.878	13.934
84		1.389	4.824	7.293	9.994	10.265	10.855	11.449	12.156	12.824	13.879
85		1.347	4.782	7.252	9.953	10.219	10.809	11.403	12.108	12.770	13.824
86		1.305	4.740	7.211	9.912	10.173	10.763	11.357	12.060	12.716	13.769
87		1.263	4.698	7.170	9.871	10.127	10.717	11.311	12.012	12.662	13.714
88		1.221	4.656	7.129	9.830	10.081	10.671	11.265	11.964	12.608	13.659
89		1.179	4.614	7.088	9.789	10.035	10.625	11.219	11.916	12.554	13.604
90		1.137	4.572	7.047	9.748	9.989	10.579	11.173	11.868	12.500	13.549
91		1.095	4.530	7.006	9.707	9.943	10.533	11.127	11.820	12.446	13.494
92		1.053	4.488	6.965	9.666	9.897	10.487	11.081	11.772	12.392	13.439
93		1.011	4.446	6.924	9.625	9.851	10.441	11.035	11.724	12.338	13.384
94		0.969	4.404	6.883	9.584	9.805	10.395	10.989	11.676	12.284	13.329
95		0.927	4.362	6.842	9.543	9.759	10.349	10.943	11.628	12.230	13.274
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PERCENTILE POINTS OF THE CHI (1 D.F.) GROUP STATISTICS

N	1	401	.025	.05	.10	.25	.50	.75	.90	.975	.99
27	8	.1472	.1732	.1978	.2287	.2664	.3592	.4406	.5114	.6171	.6720
	9	.1796	.2085	.2356	.2692	.3113	.4085	.4900	.5611	.6773	.7330
	10	.2160	.2456	.2749	.3111	.3573	.4589	.5483	.6249	.7502	.8060
	11	.2502	.2844	.3159	.3546	.4048	.5105	.6027	.6895	.8201	.8760
	12	.2882	.3250	.3586	.3997	.4537	.5634	.6580	.7498	.8833	.9390
	13	.3297	.3674	.4031	.4466	.5042	.6180	.7157	.8095	.9453	.10018
	14	.3751	.4118	.4496	.4953	.5569	.6745	.7760	.8705	.10109	
	15	.4243	.4621	.5001	.5484	.6145	.7362	.8417	.9387	1.0654	1.1330
	16	.4767	.5157	.5548	.6034	.6752	.8015	.9117	1.0192	1.1462	1.2205
	17	.5318	.5719	.6112	.6599	.7372	.8681	.9741	1.0823	1.2093	1.2840
	18	.5894	.6297	.6692	.7179	.8002	.9352	1.0482	1.1574	1.2838	1.3580
	19	.6494	.6899	.7296	.7774	.8642	.1000	1.1172	1.2272	1.3532	1.4270
	20	.7116	.7523	.7922	.8392	.9302	1.0500	1.1692	1.2792	1.4052	1.4790
	21	.7760	.8169	.8570	.9022	1.0000	1.1200	1.2392	1.3492	1.4752	1.5490
	22	.8424	.8835	.9238	.9682	1.0700	1.1900	1.3092	1.4192	1.5452	1.6190
	23	.9106	.9519	.9924	1.0360	1.1400	1.2600	1.3792	1.4892	1.6152	1.6890
	24	.9806	1.0222	1.0629	1.1056	1.2100	1.3300	1.4492	1.5592	1.6852	1.7590
	25	1.0524	1.0942	1.1351	1.1780	1.2800	1.4000	1.5192	1.6292	1.7552	1.8290
	26	1.1260	1.1680	1.2091	1.2520	1.3500	1.4700	1.5892	1.7092	1.8352	1.9090
	27	1.2016	1.2439	1.2851	1.3280	1.4200	1.5400	1.6592	1.7792	1.9052	1.9790
28	1	.0004	.0011	.0023	.0047	.0092	.0202	.0406	.0809	.1618	.2425
	2	.0048	.0117	.0216	.0426	.0873	.0202	.0406	.0809	.1618	.2425
	3	.0201	.0386	.0724	.1352	.2612	.0406	.0809	.1618	.2425	.3232
	4	.0384	.0696	.1271	.2280	.4112	.0809	.1618	.2425	.3232	.4039
	5	.0611	.1042	.1871	.3320	.5802	.1618	.3232	.4846	.6460	.8074
	6	.0861	.1442	.2546	.4427	.7713	.3232	.4846	.6460	.8074	.9688
	7	.1122	.1844	.3192	.5427	1.0000	.4846	.6460	.8074	.9688	1.1302
	8	.1404	.2264	.3864	.6427	1.2800	.6460	.8074	.9688	1.1302	1.2916
	9	.1706	.2706	.4546	.7702	1.6000	.8074	.9688	1.1302	1.2916	1.4530
	10	.2024	.3166	.5266	.8802	2.0000	.9688	1.1302	1.2916	1.4530	1.6144
	11	.2362	.3652	.5952	1.0600	2.4000	1.1302	1.2916	1.4530	1.6144	1.7758
	12	.2716	.4156	.6756	1.2200	2.8000	1.2916	1.4530	1.6144	1.7758	1.9372
	13	.3084	.4684	.7584	1.3900	3.2000	1.4530	1.6144	1.7758	1.9372	2.0986
	14	.3461	.5221	.8321	1.5800	3.6000	1.6144	1.7758	1.9372	2.0986	2.2600
	15	.3848	.5768	.9268	1.7900	4.0000	1.7758	1.9372	2.0986	2.2600	2.4214
	16	.4246	.6326	1.0446	2.0200	4.4000	1.9372	2.0986	2.2600	2.4214	2.5828
	17	.4654	.6964	1.1864	2.2800	4.8000	2.0986	2.2600	2.4214	2.5828	2.7442
	18	.5072	.7592	1.3532	2.5800	5.2000	2.2600	2.4214	2.5828	2.7442	2.9056
	19	.5500	.8220	1.5460	2.9200	5.6000	2.4214	2.5828	2.7442	2.9056	3.0670
	20	.5936	.8966	1.7666	3.3000	6.0000	2.5828	2.7442	2.9056	3.0670	3.2284
	21	.6380	.9720	2.0160	3.7200	6.4000	2.7442	2.9056	3.0670	3.2284	3.3898
	22	.6832	1.0482	2.2982	4.1800	6.8000	2.9056	3.0670	3.2284	3.3898	3.5512
	23	.7292	1.1252	2.6122	4.6800	7.2000	3.0670	3.2284	3.3898	3.5512	3.7126
	24	.7756	1.2024	2.9584	5.2200	7.6000	3.2284	3.3898	3.5512	3.7126	3.8740
	25	.8224	1.2796	3.3364	5.8000	8.0000	3.3898	3.5512	3.7126	3.8740	4.0354
	26	.8696	1.3568	3.7464	6.4200	8.4000	3.5512	3.7126	3.8740	4.0354	4.1968
	27	.9172	1.4340	4.1884	7.0800	8.8000	3.7126	3.8740	4.0354	4.1968	4.3582

PERCENTILE POINTS OF THE CHI (1 D.F.) ORDER STATISTICS

N	1	.01	.025	.05	.10	.25	.50	.75	.90	.95	.975	.99
28	28	1.4337	1.5405	1.6378	1.7562	1.9747	2.2500	2.5687	2.8980	3.1164	3.3189	3.5687
29	1	.0004	.0011	.0022	.0045	.0124	.0296	.0585	.0958	.1233	.1503	.1851
	2	.0065	.0106	.0155	.0232	.0416	.0718	.1133	.1606	.2134	.2245	.2636
	3	.0194	.0274	.0361	.0484	.0751	.1145	.1644	.2189	.2554	.2803	.3314
	4	.0370	.0488	.0608	.0772	.1107	.1575	.2145	.2742	.3136	.3408	.3943
	5	.0581	.0733	.0885	.1084	.1478	.2009	.2636	.3278	.3697	.4078	.4544
	6	.0820	.1004	.1183	.1414	.1861	.2447	.3123	.3806	.4246	.4644	.5130
	7	.1080	.1294	.1499	.1740	.2254	.2880	.3611	.4329	.4789	.5204	.5706
	8	.1361	.1603	.1832	.2119	.2657	.3337	.4100	.4852	.5330	.5760	.6278
	9	.1659	.1928	.2179	.2492	.3070	.3793	.4584	.5377	.5872	.6314	.6850
	10	.1974	.2268	.2540	.2877	.3494	.4256	.5083	.5906	.6418	.6874	.7425
	11	.2305	.2622	.2915	.3275	.3929	.4728	.5601	.6443	.6971	.7443	.8027
	12	.2652	.2992	.3305	.3686	.4374	.5212	.6118	.6989	.7534	.8019	.8588
	13	.3015	.3378	.3709	.4112	.4834	.5708	.6648	.7547	.8108	.8608	.9203
	14	.3394	.3779	.4129	.4553	.5310	.6218	.7152	.8120	.8693	.9212	.9824
	15	.3790	.4197	.4565	.5010	.5811	.6745	.7753	.8712	.9307	.9834	1.0454
	16	.4206	.4634	.5021	.5487	.6311	.7291	.8325	.9325	.9938	1.0483	1.1131
	17	.4641	.5092	.5497	.5984	.6843	.7861	.8921	.9964	1.0597	1.1159	1.1827
	18	.5099	.5572	.5996	.6505	.7399	.8456	.9574	1.0634	1.1289	1.1870	1.2559
	19	.5537	.6036	.6472	.6965	.7885	.8964	1.0124	1.1242	1.2021	1.2622	1.3337
	20	.6035	.6561	.7019	.7534	.8496	.9650	1.0847	1.2024	1.2841	1.3427	1.4169
	21	.6541	.7106	.7592	.8133	.9128	1.0341	1.1570	1.2798	1.3643	1.4206	1.5071
	22	.7077	.7670	.8180	.8741	.9762	1.0997	1.2248	1.3522	1.4384	1.4924	1.5801
	23	.7662	.8285	.8815	.9396	1.0442	1.1702	1.3002	1.4302	1.5184	1.5694	1.6601
	24	.8350	.9003	.9553	1.0150	1.1220	1.2492	1.3802	1.5102	1.5984	1.6464	1.7417
	25	.9056	.9739	1.0307	1.0880	1.1970	1.3262	1.4592	1.5892	1.6764	1.7194	1.8181
	26	1.0223	1.0950	1.1558	1.2171	1.3284	1.4592	1.5922	1.7182	1.8024	1.8404	1.9431
	27	1.1273	1.2064	1.2711	1.3348	1.4484	1.5804	1.7144	1.8384	1.9224	1.9554	2.0614
	28	1.2594	1.3480	1.4277	1.5014	1.6164	1.7484	1.8824	1.9964	2.0804	2.1164	2.2244
	29	1.4508	1.5571	1.6535	1.7524	1.8992	2.0233	2.1584	2.2804	2.3644	2.3984	2.5044
30	1	.0004	.0011	.0021	.0044	.0120	.0286	.0566	.0927	.1194	.1455	.1793
	2	.0063	.0103	.0150	.0224	.0402	.0694	.1096	.1555	.1873	.2175	.2554
	3	.0187	.0265	.0349	.0468	.0726	.1107	.1593	.2110	.2473	.2803	.3211
	4	.0357	.0471	.0588	.0746	.1070	.1523	.2076	.2654	.3046	.3380	.3804
	5	.0561	.0708	.0854	.1047	.1428	.1942	.2549	.3173	.3579	.3951	.4404
	6	.0790	.0968	.1141	.1365	.1797	.2364	.3020	.3683	.4111	.4399	.4970
	7	.1042	.1248	.1446	.1698	.2176	.2791	.3491	.4189	.4635	.5039	.5527
	8	.1312	.1545	.1766	.2044	.2565	.3223	.3963	.4693	.5157	.5575	.6079
	9	.1598	.1857	.2100	.2403	.2962	.3662	.4438	.5189	.5680	.6111	.6630
	10	.1901	.2184	.2447	.2773	.3369	.4107	.4919	.5708	.6205	.6650	.7183
	11	.2218	.2524	.2807	.3155	.3787	.4561	.5406	.6223	.6736	.7194	.7742
	12	.2550	.2879	.3189	.3549	.4215	.5024	.5902	.6747	.7275	.7746	.8309
	13	.2897	.3247	.3567	.3956	.4655	.5499	.6409	.7281	.7825	.8309	.8886
	14	.3259	.3630	.3968	.4377	.5108	.5986	.6928	.7827	.8387	.8885	.9478
	15	.3637	.4029	.4384	.4813	.5576	.6488	.7463	.8350	.8966	.9478	1.0036
	16	.4031	.4444	.4817	.5265	.6063	.7007	.8014	.8920	.9564	1.0000	1.0516

PERCENTILE POINTS OF THE CHI (1 D.F.) ORDER STATISTICS

N	1	.01	.025	.05	.10	.25	.50	.75	.90	.95	.975	.99
17	.4444	.4878	.5267	.5736	.6564	.7545	.8587	.9573	1.0185	1.0727	1.1371	1.2056
18	.4877	.5331	.5739	.6228	.7089	.8106	.9184	1.0203	1.0833	1.1392	1.2056	1.2779
19	.5331	.5807	.6233	.6743	.7638	.8694	.9810	1.0863	1.1515	1.2093	1.2779	1.3546
20	.5811	.6309	.6754	.7285	.8217	.9313	1.0471	1.1562	1.2237	1.2836	1.3546	1.4369
21	.6319	.6840	.7305	.7860	.8931	.9971	1.1173	1.2307	1.3009	1.3630	1.4369	1.5261
22	.6861	.7407	.7893	.8473	.9686	1.0675	1.1928	1.3110	1.3841	1.4490	1.5261	1.6241
23	.7442	.8015	.8525	.9142	1.0192	1.1146	1.2477	1.3785	1.4751	1.5431	1.6241	1.7337
24	.8073	.8675	.9211	.9849	1.0952	1.2269	1.3649	1.4953	1.5762	1.6481	1.7337	1.8592
25	.8764	.9400	.9966	1.0639	1.1816	1.3198	1.4650	1.6046	1.6908	1.7576	1.8592	2.0073
26	.9535	1.0211	1.0812	1.1528	1.2781	1.4257	1.5824	1.7315	1.8246	1.9078	2.0073	2.1905
27	1.0415	1.1140	1.1785	1.2555	1.3906	1.5504	1.7212	1.8849	1.9876	2.0797	2.1905	2.4341
28	1.1457	1.2246	1.2950	1.3793	1.5279	1.7053	1.8968	2.0824	2.1999	2.3059	2.4341	2.8055
29	1.2770	1.3653	1.4445	1.5400	1.7100	1.9164	2.1456	2.3683	2.5129	2.6446	2.8055	3.2882
30	1.4673	1.5731	1.6594	1.7873	2.0032	2.2761	2.5919	2.9195	3.1368	3.3482	3.5868	

TABLE 3 Contd.

PERCENTILE POINTS OF THE USUAL ORDER STATISTICS

$C = 2.0$

N	.01	.025	.05	.10	.25	.50	.75	.90	.95	.975	.99
2	.07089	.11251	.16015	.22952	.37926	.5887	.83255	1.07298	1.22387	1.35810	1.51743
3	.12459	.14486	.16015	.16165	.18325	1.10813	1.41778	1.72329	1.91733	2.09182	2.30126
4	.05788	.09187	.13076	.18740	.26961	.40068	.67978	.93669	1.09939	1.10889	1.23897
5	.26639	.31472	.38135	.46781	.57285	.83255	1.05820	1.27697	1.41417	1.53665	1.68281
6	.69258	.58811	.67787	.78088	.89107	1.05820	1.27697	1.41417	1.53665	1.68281	1.89357
7	.05013	.07956	.11324	.16230	.22918	.41628	.58871	.75871	.86541	.96032	1.07298
8	.20714	.26453	.32048	.39218	.47766	.57285	.83255	1.05820	1.27697	1.41417	1.53665
9	.78966	.66657	.73667	.81356	.89066	.97602	1.05820	1.27697	1.41417	1.53665	1.68281
10	.61655	.71106	.80019	.89002	1.08113	1.25880	1.63338	1.91065	2.09875	2.25071	2.44698
11	.06183	.07116	.10128	.14516	.20000	.37233	.52655	.67861	.77405	.85894	.95070
12	.18229	.23278	.28199	.34100	.40000	.47766	.57285	.67861	.77405	.85894	.95070
13	.33416	.40820	.48506	.56213	.64139	.72066	.80000	.87933	.95866	1.03800	1.11733
14	.50112	.57749	.65486	.73223	.80960	.88697	.96434	1.04167	1.11900	1.19633	1.27366
15	.71252	.80649	.89270	.98042	1.06813	1.15580	1.24347	1.33114	1.41881	1.50648	1.59415
16	.04093	.06649	.09206	.11763	.14320	.16877	.19434	.21991	.24548	.27105	.29662
17	.16471	.21032	.25593	.30154	.34715	.39276	.43837	.48398	.52959	.57520	.62081
18	.29755	.35454	.41153	.46852	.52551	.58250	.63949	.69648	.75347	.81046	.86745
19	.43593	.50203	.56813	.63423	.69993	.76563	.83133	.89703	.96273	1.02843	1.09413
20	.59041	.66666	.73595	.80524	.87453	.94382	1.01311	1.08240	1.15169	1.22098	1.29027
21	.78988	.88212	.96636	1.05060	1.13484	1.21908	1.30332	1.38756	1.47180	1.55604	1.64028
22	.03789	.06014	.08560	.11268	.14076	.16884	.19692	.22500	.25308	.28116	.30924
23	.15141	.19335	.23529	.27723	.31917	.36111	.40305	.44499	.48693	.52887	.57081
24	.27099	.32288	.37477	.42666	.47855	.53044	.58233	.63422	.68611	.73800	.78989
25	.39175	.45100	.50924	.56748	.62572	.68396	.74220	.80044	.85868	.91692	.97516
26	.51294	.58072	.64850	.71628	.78406	.85184	.91962	.98740	1.05518	1.12296	1.19074
27	.66411	.73955	.81499	.89043	.96587	1.04131	1.11675	1.19219	1.26763	1.34307	1.41851
28	.85423	.94674	1.03925	1.13176	1.22427	1.31678	1.40929	1.50180	1.59431	1.68682	1.77933
29	.03544	.05626	.08007	.10676	.13545	.16414	.19283	.22152	.25021	.27890	.30759
30	.14090	.17622	.21154	.24686	.28218	.31750	.35282	.38814	.42346	.45878	.49410
31	.25054	.29847	.34640	.39433	.44226	.49019	.53812	.58605	.63398	.68191	.72984
32	.35955	.41328	.46701	.52074	.57447	.62820	.68193	.73566	.78939	.84312	.89685
33	.46900	.52906	.58912	.64918	.70924	.76930	.82936	.88942	.94948	1.00954	1.06960
34	.58911	.65634	.72357	.79080	.85803	.92526	.99249	1.05972	1.12695	1.19418	1.26141
35	.72645	.80093	.86809	.93525	1.00241	1.06957	1.13673	1.20389	1.27105	1.33821	1.40537
36	.90902	.99791	1.07873	1.15955	1.24037	1.32119	1.40201	1.48283	1.56365	1.64447	1.72529
37	.03362	.05304	.07549	.10090	.12727	.15364	.17999	.20634	.23269	.25904	.28539
38	.13232	.16896	.20667	.24438	.28209	.31980	.35751	.39522	.43293	.47064	.50835
39	.23041	.27894	.32747	.37600	.42453	.47306	.52159	.57012	.61865	.66718	.71571
40	.33350	.38384	.43418	.48452	.53486	.58520	.63554	.68588	.73622	.78656	.83690
41	.43300	.48813	.53806	.58799	.63792	.68785	.73778	.78771	.83764	.88757	.93750
42	.53270	.59638	.65961	.72284	.78607	.84930	.91253	.97576	1.03899	1.10222	1.16545
43	.64894	.71461	.77967	.84473	.90979	.97485	1.03991	1.10497	1.16993	1.23489	1.29985
44	.78022	.85369	.91777	.98185	1.04593	1.11001	1.17409	1.23817	1.30225	1.36633	1.43041
45	.95656	1.04396	1.12932	1.21468	1.29994	1.38520	1.47046	1.55572	1.64098	1.72624	1.81150
46	.03170	.05032	.07162	.09565	.12140	.14787	.17412	.20027	.22632	.25227	.27812
47	.12514	.15979	.19356	.22637	.25918	.29199	.32480	.35761	.39042	.42323	.45604
48	.22067	.26281	.30495	.34709	.38923	.43137	.47351	.51565	.55779	.60000	.64214
49	.31281	.36000	.40719	.45438	.50157	.54876	.59595	.64314	.69033	.73752	.78471
50	.40495	.45512	.50529	.55546	.60563	.65580	.70597	.75614	.80631	.85648	.90665
51	.49632	.55146	.60660	.66174	.71688	.77202	.82716	.88230	.93744	.99258	1.04772
52	.58769	.64683	.70597	.76511	.82425	.88339	.94253	1.00167	1.06081	1.11995	1.17909
53	.67906	.74220	.80534	.86848	.93162	.99476	1.05790	1.12104	1.18418	1.24732	1.31046
54	.77043	.83757	.90471	.97185	1.03899	1.10613	1.17327	1.24041	1.30755	1.37469	1.44183
55	.86180	.93394	1.00608	1.07822	1.15036	1.22250	1.29464	1.36678	1.43892	1.51106	1.58320
56	.95317	1.03031	1.10745	1.18459	1.26173	1.33887	1.41601	1.49315	1.57029	1.64743	1.72457
57	.02984	.04846	.06976	.09379	.12054	.14899	.17814	.20729	.23644	.26559	.29474
58	.12154	.15979	.19804	.23629	.27454	.31279	.35104	.38929	.42754	.46579	.50404
59	.22067	.26281	.30495	.34709	.38923	.43137	.47351	.51565	.55779	.60000	.64214
60	.31281	.36000	.40719	.45438	.50157	.54876	.59595	.64314	.69033	.73752	.78471
61	.40495	.45512	.50529	.55546	.60563	.65580	.70597	.75614	.80631	.85648	.90665
62	.49632	.55146	.60660	.66174	.71688	.77202	.82716	.88230	.93744	.99258	1.04772
63	.58769	.64683	.70597	.76511	.82425	.88339	.94253	1.00167	1.06081	1.11995	1.17909
64	.67906	.74220	.80534	.86848	.93162	.99476	1.05790	1.12104	1.18418	1.24732	1.31046
65	.77043	.83757	.90471	.97185	1.03899	1.10613	1.17327	1.24041	1.30755	1.37469	1.44183
66	.86180	.93394	1.00608	1.07822	1.15036	1.22250	1.29464	1.36678	1.43892	1.51106	1.58320
67	.95317	1.03031	1.10745	1.18459	1.26173	1.33887	1.41601	1.49315	1.57029	1.64743	1.72457
68	.02798	.04710	.06840	.09189	.11858	.14747	.17856	.21085	.24434	.27903	.31392
69	.12154	.15979	.19804	.23629	.27454	.31279	.35104	.38929	.42754	.46579	.50404
70	.22067	.26281	.30495	.34709	.38923	.43137	.47351	.51565	.55779	.60000	.64214
71	.31281	.36000	.40719	.45438	.50157	.54876	.59595	.64314	.69033	.73752	.78471
72	.40495	.45512	.50529	.55546	.60563	.65580	.70597	.75614	.80631	.85648	.90665
73	.49632	.55146	.60660	.66174	.71688	.77202	.82716	.88230	.93744	.99258	1.04772
74	.58769	.64683	.70597	.76511	.82425	.88339	.94253	1.00167	1.06081	1.11995	1.17909
75	.67906	.74220	.80534	.86848	.93162	.99476	1.05790	1.12104	1.18418	1.24732	1.31046
76	.77043	.83757	.90471	.97185	1.03899	1.10613	1.17327	1.24041	1.30755	1.37469	1.44183
77	.86180	.93394	1.00608	1.07822	1.15036	1.22250	1.29464	1.36678	1.43892	1.51106	1.58320
78	.95317	1.03031	1.10745	1.18459	1.26173	1.33887	1.41601	1.49315	1.57029	1.64743	1.72457
79	.02514	.04476	.06606	.08955	.11524	.14313	.17322	.20561	.24030	.27739	.31588
80	.12154	.15979	.19804	.23629	.27454	.31279	.35104	.38929	.42754	.46579	.50404
81	.22067	.26281	.30495	.34709	.38923	.43137	.47351	.51565	.55779	.60000	.64214
82	.31281	.36000	.40719	.45438	.50157	.54876	.59595	.64314	.69033	.73752	.78471
83	.40495	.45512	.50529	.55546	.60563	.65580	.70597	.75614	.80631	.85648	.90665
84	.49632	.55146	.60660	.66174	.71688	.77202	.82716	.88230	.93744	.99258	1.04772
85	.58769	.64683	.70597	.76511	.82425	.88339	.94253	1.00167	1.06081	1.11995	1.17909
86	.67906	.74220	.80534	.86848	.93162	.99476	1.05790	1.12104	1.18418	1.24732	1.31046
87	.77043	.83757	.90471	.97185	1.03899	1.10613	1.17327	1.24041	1.30755	1.37469	1.44183
88	.86180	.93394	1.00608	1.07822	1.15036	1.22250	1.29464	1.36678	1.43892	1.51106	1.58320
89	.95317	1.03031	1.10745	1.18459	1.26173	1.33887	1.41601	1.49315	1.57029	1.64743	1.72457
90	.02170	.04132	.06262	.08561	.11130	.13959	.17048	.20397	.24016	.27905	.31974
91	.12154	.15979	.19804	.23629	.27454	.31279	.35104	.38929	.42754	.46579	.50404
92	.22067	.26281	.30495	.34709	.38923	.43137	.47351	.51565	.55779	.60000	.64214
93	.31281	.36000	.40719	.45438	.50157	.54876	.59595	.64314	.69033	.73752	.78471
94	.40495	.45512	.50529	.55546	.60563	.65580	.70597	.75614	.80631	.85648	.90665
95	.49632	.55146	.60660	.66174	.71688	.77202	.82716	.88230	.93744	.99258	1.04772
96	.58769	.64683	.70597	.76511	.8242						

PERCENTILE POINTS OF THE WEIBULL ORDER STATISTICS

$$C = 1.5$$

		.01	.025	.05	.10	.25	.50	.75	.90	.95	.975	.99
1	1	.12735	.17436	.23100	.30808	.46042	.65451	.86362	1.05797	1.17541	1.27761	1.39600
2	2	.47651	.49468	.57718	.67916	.86362	1.09561	1.32217	1.54557	1.68328	1.80474	1.96793
3	1	.10233	.14300	.19667	.27195	.42162	.65451	.86362	1.09561	1.27761	1.48155	1.74700
4	2	.32606	.37558	.46376	.58424	.74970	.96363	1.09561	1.27761	1.48155	1.68328	1.80474
5	3	.56752	.65399	.73268	.84804	.95765	1.20020	1.41746	1.62507	1.75469	1.86955	2.00615
6	1	.09123	.13199	.17607	.23348	.34893	.49603	.65451	.80179	.99079	1.26813	1.65797
7	2	.28380	.34513	.40239	.47292	.59943	.75011	.90751	1.05337	1.14141	1.21860	1.30887
8	3	.47114	.54155	.60505	.68358	.82724	.98077	1.14082	1.30568	1.40185	1.48656	1.58666
9	4	.65114	.77292	.84167	.92657	1.05151	1.22512	1.40071	1.6784	1.80266	1.91362	2.04509
10	1	.08342	.12072	.16012	.21354	.31914	.45367	.59862	.73333	.81473	.88546	.97763
11	2	.25621	.31157	.36376	.42686	.54110	.67663	.81816	.96877	1.07290	1.09696	1.17757
12	3	.41604	.48772	.53566	.60373	.72341	.86363	1.00922	1.14601	1.26611	1.29809	1.38260
13	4	.51468	.61452	.67644	.75442	.88077	1.06075	1.21715	1.34758	1.45901	1.53083	1.63553
14	5	.76242	.86194	.91320	.99876	1.15000	1.33117	1.52755	1.71830	1.83877	1.96681	2.07612
15	1	.07755	.11323	.14885	.19852	.29669	.42176	.55452	.68175	.75743	.82318	.89958
16	2	.23625	.28728	.33691	.39356	.47982	.57364	.67387	.77494	.86660	1.00096	1.08389
17	3	.37918	.43624	.48786	.54296	.65880	.78568	.91718	1.03849	1.11215	1.17657	1.25204
18	4	.51468	.57621	.63121	.69677	.81095	.94327	1.08076	1.20831	1.28623	1.35471	1.43535
19	5	.65468	.72333	.78769	.85337	.97677	1.12697	1.27215	1.41468	1.50266	1.58047	1.67309
20	6	.82804	.90653	.97360	1.06509	1.20030	1.37683	1.57450	1.76993	1.86756	1.97333	2.10027
21	1	.07292	.10552	.13995	.18665	.27895	.39654	.52324	.66098	.71213	.77396	.84578
22	2	.22087	.26858	.31310	.36791	.46639	.58290	.70651	.81656	.88839	.94341	1.01230
23	3	.35185	.40877	.46263	.51016	.61020	.72345	.84080	.96162	1.02929	1.08860	1.15785
24	4	.47250	.53886	.60290	.67013	.77320	.88363	.99814	1.10308	1.17301	1.23429	1.30622
25	5	.59126	.67187	.75507	.84119	.97177	1.08010	1.18454	1.25774	1.32256	1.39847	1.47624
26	6	.72076	.80555	.89332	.98301	1.08000	1.18686	1.31440	1.45201	1.53734	1.61316	1.70339
27	7	.88157	.97556	1.02169	1.10096	1.25122	1.41012	1.59637	1.77606	1.89138	1.99536	2.12037
28	1	.06913	.10003	.13267	.17696	.26444	.37692	.49403	.60765	.67510	.73371	.80179
29	2	.20851	.25356	.29658	.34732	.44018	.55071	.66494	.77060	.83450	.89177	.94508
30	3	.33044	.38010	.42705	.47904	.57361	.68364	.79738	.90198	.96531	1.02052	1.08220
31	4	.45050	.50333	.55370	.60270	.69673	.79747	.89652	1.02563	1.09003	1.14637	1.21232
32	5	.56661	.62727	.68600	.74282	.83858	.93397	1.04317	1.15333	1.22007	1.27939	1.34888
33	6	.65488	.71316	.76469	.82569	.93113	1.05300	1.17968	1.29768	1.37009	1.43397	1.50050
34	7	.77640	.83722	.89300	.95007	1.07386	1.20198	1.34036	1.48318	1.56637	1.64042	1.72872
35	8	.92653	.99833	1.02250	1.13363	1.27573	1.44015	1.62057	1.79825	1.91168	2.01613	2.13755
36	1	.06594	.09543	.12657	.16880	.25227	.35862	.47320	.57968	.64405	.69222	.74492
37	2	.19829	.24112	.28108	.33029	.41857	.52318	.63223	.73224	.79335	.84622	.90787
38	3	.31303	.36008	.40262	.44776	.54323	.65325	.76493	.86376	.91356	.96573	1.02667
39	4	.41354	.46486	.50894	.55347	.65347	.75747	.86563	.96503	1.02527	1.07792	1.13954
40	5	.51191	.56341	.60907	.66310	.75635	.86363	.97413	1.07592	1.13778	1.19195	1.25552
41	6	.50756	.56133	.60884	.66496	.76165	.87205	1.00791	1.14630	1.25922	1.31628	1.37958
42	7	.70756	.76429	.81437	.87354	.97565	1.09360	1.21648	1.33107	1.40151	1.46375	1.53745
43	8	.81992	.88113	.93520	.99048	1.11098	1.24136	1.37907	1.50975	1.62115	1.68374	1.75040
44	9	.96502	1.03531	1.09720	1.17263	1.26531	1.40006	1.54780	1.68175	1.79932	1.91368	2.03254
45	1	.06322	.09140	.12136	.16183	.24186	.34392	.45367	.55565	.61345	.67105	.73333
46	2	.18963	.23059	.26881	.31586	.40022	.50031	.60456	.70764	.75856	.80908	.86798
47	3	.29848	.34336	.38302	.42711	.51274	.61213	.71955	.81362	.87052	.92014	.97808
48	4	.39666	.44161	.48332	.53332	.61975	.71710	.82164	.91569	.97264	1.02237	1.08051
49	5	.48608	.53272	.57581	.62680	.71470	.81342	.91952	1.01497	1.07287	1.12351	1.18286
50	6	.57096	.61735	.66582	.71840	.80856	.90710	1.01088	1.11772	1.17705	1.22950	1.29117
51	7	.65901	.71150	.76727	.81730	.90611	1.01000	1.12447	1.22875	1.29188	1.34761	1.41289
52	8	.75264	.80799	.86476	.91433	1.01300	1.12766	1.24793	1.35067	1.42847	1.48934	1.56150
53	9	.85935	.91900	.97330	1.03436	1.14394	1.27075	1.40006	1.53082	1.61377	1.68498	1.76293
54	10	.99874	1.06503	1.12653	1.20133	1.34111	1.49000	1.66233	1.84350	1.94491	2.04495	2.16581

PERCENTILE POINTS OF THE WEIBULL ORDER STATISTICS

C = 5.0

n	1	.01	.025	.05	.10	.25	.50	.75	.90	.95	.975	.99
2	1	.34702	.41733	.48062	.55505	.62854	.80902	.92932	1.02858	1.08416	1.13025	1.18153
	2	.63758	.70333	.75973	.82611	.92932	1.04192	1.14986	1.24321	1.29741	1.34341	1.39568
3	1	.31090	.38489	.44110	.51181	.57562	.74401	.85643	.94846	.99972	1.04271	1.08949
	2	.61102	.67275	.72004	.77332	.83048	.92922	1.02288	1.10274	1.14862	1.18749	1.23144
	3	.75334	.80870	.85507	.90097	.92893	1.05958	1.19057	1.27478	1.32457	1.36732	1.41632
4	1	.30201	.36331	.41841	.46932	.52670	.70429	.80902	.89543	.94382	.98394	1.02858
	2	.53273	.58748	.63434	.68769	.74736	.84609	.92263	1.07612	1.06837	1.10390	1.14406
	3	.64592	.71590	.77943	.82679	.90569	.99034	1.07183	1.14266	1.18400	1.21924	1.25955
	4	.84111	.87294	.91470	.96256	1.04192	1.12938	1.21684	1.29555	1.34263	1.38334	1.43038
5	1	.28883	.34745	.40015	.46211	.52462	.73355	.77737	.85635	.90262	.94099	.98368
	2	.54618	.59319	.63269	.67335	.71560	.82258	.90452	.97405	1.01385	1.04735	1.08516
	3	.64501	.69160	.73176	.77700	.82665	.92222	1.00460	1.06759	1.10730	1.13934	1.17584
	4	.78854	.82082	.84600	.88341	.93377	1.02995	1.10415	1.16944	1.20789	1.24090	1.27888
	5	.87321	.91757	.95461	.99237	1.07234	1.15376	1.23594	1.31034	1.35601	1.39528	1.44088
6	1	.27849	.33501	.38582	.44556	.50469	.64943	.74600	.82568	.87030	.90730	.94846
	2	.48675	.53509	.57871	.62734	.67627	.78071	.84826	.93484	.97293	1.00497	1.04110
	3	.61578	.66400	.70922	.75158	.79167	.88138	.95770	1.01906	1.05458	1.08470	1.11895
	4	.71741	.75908	.79449	.83473	.87047	.93122	1.03960	1.09923	1.14412	1.16392	1.19806
	5	.80926	.85025	.88458	.92378	.95842	1.05871	1.12790	1.18932	1.22575	1.25717	1.29348
	6	.90997	.95107	.98641	1.02718	1.09558	1.17245	1.25080	1.32285	1.36658	1.40475	1.44923
7	1	.27003	.32464	.37410	.42203	.46816	.62922	.7233	.80061	.84388	.87975	.91966
	2	.46096	.51426	.56122	.60656	.64885	.76348	.83935	.90364	.94039	.97124	1.00613
	3	.59117	.64422	.69278	.73425	.77165	.85463	.92185	.98062	1.01459	1.04336	1.07603
	4	.68739	.73723	.78105	.82045	.85609	.92932	.97405	1.05028	1.08305	1.11098	1.14290
	5	.76939	.81738	.85969	.89646	.92877	1.00202	1.06562	1.12149	1.15437	1.18257	1.21501
	6	.84898	.89631	.91818	.95461	1.01489	1.08102	1.14647	1.20500	1.23990	1.27010	1.30514
	7	.93892	.97752	1.01071	1.04927	1.11413	1.18751	1.26289	1.33269	1.37527	1.41257	1.45615
8	1	.26292	.31420	.36424	.42065	.46124	.61312	.70429	.77952	.82164	.85657	.89543
	2	.45663	.50364	.54367	.58935	.63466	.74176	.81544	.87784	.91351	.94349	.97728
	3	.57434	.61464	.65196	.68712	.72337	.82682	.89296	.94972	.98250	1.01024	1.04173
	4	.66383	.70226	.73487	.77188	.80318	.89681	.95891	1.01273	1.04404	1.07069	1.10108
	5	.73933	.77571	.80660	.84173	.87021	.96123	1.02136	1.07393	1.10475	1.13110	1.16133
	6	.80924	.84447	.87467	.90867	.93693	1.02616	1.08613	1.13916	1.17051	1.19749	1.22862
	7	.88900	.91503	.94422	.97032	1.00008	1.08422	1.09908	1.16162	1.21786	1.25155	1.28079
	8	.96256	.99216	1.03078	1.06744	1.12948	1.20006	1.27302	1.34092	1.38263	1.41920	1.46204
9	1	.25672	.30801	.35576	.41085	.46227	.59885	.68790	.76137	.80251	.83662	.87458
	2	.44539	.49104	.53017	.57471	.61697	.72331	.79513	.85594	.89070	.91990	.95282
	3	.55949	.60607	.63453	.67361	.71077	.80460	.86887	.92399	.95580	.98272	1.01325
	4	.64453	.68181	.71343	.74932	.78076	.87033	.93039	.98236	1.01256	1.03921	1.06749
	5	.71548	.75061	.78043	.81431	.84696	.92932	.98698	1.03727	1.06667	1.09177	1.12050
	6	.77946	.81322	.84193	.87462	.90825	.98638	1.04303	1.09284	1.12215	1.14729	1.17621
	7	.84116	.87423	.90263	.93663	.97125	1.04580	1.10294	1.15372	1.18386	1.20986	1.23994
	8	.90550	.93868	.96710	.99974	1.05133	1.11617	1.17434	1.22872	1.26141	1.28986	1.32304
	9	.98239	1.01736	1.04772	1.08279	1.14213	1.21077	1.28172	1.34815	1.38900	1.42495	1.46715
10	1	.25144	.30247	.34835	.40229	.45179	.58636	.67755	.74549	.78578	.81918	.85635
	2	.43547	.48020	.51847	.56202	.60268	.70733	.77753	.83698	.87095	.89949	.93165
	3	.54633	.59395	.63192	.67774	.71968	.82557	.88226	.92021	.93302	.95924	.98808
	4	.62822	.66454	.69534	.72929	.76718	.84806	.90644	.95692	.98622	1.01112	1.03748
	5	.69571	.72538	.75882	.79171	.82450	.90316	.95822	1.00746	1.03579	1.05996	1.08752
	6	.75562	.78261	.81508	.84753	.87991	.95907	1.00940	1.05699	1.08492	1.10883	1.13678
	7	.81180	.83851	.87150	.90128	.93190	1.01097	1.06088	1.10840	1.13661	1.16078	1.18865
	8	.86755	.89388	.92661	.95621	1.00638	1.05626	1.11711	1.16495	1.19519	1.22038	1.24960
	9	.92488	.95044	.98140	1.01703	1.06913	1.12705	1.18526	1.23908	1.26994	1.29772	1.33018
	10	.99337	1.03296	1.06205	1.09609	1.15376	1.22008	1.28932	1.35444	1.39460	1.43002	1.47167